WELCOME TO TECHNICAL ORDER 00-105E-9.

THIS IS SEGMENT 11 COVERING CHAPTER 18.



ORDER, CLICK ON THE CONTINUE BUTTON.

TO SEE THE SEGMENT INFORMATION CHANGE NOTICE, CLICK ON THE NOTICE BUTTON.







CONTACT

IF YOU NEED TO CONTACT THE TECHNICAL CONTENT MANAGER FOR THIS TECHNICAL ORDER, CLICK ON THE <u>CONTACT</u> BUTTON.

TECHNICAL ORDER 00-105E-9 TECHNICAL CONTENT MANAGER

WRITTEN CORRESPONDENCE:

HQ AFCESA/CEXF

ATTN: Fire Protection Egress Manager

139 Barnes Drive Suite 1

Tyndall AFB, Florida 32403-5319

E-MAIL: Tom.Stemphoski@tyndall.af.mil

INTERNET: HQ AFCESA Fire Protection PUBLIC WEB PAGE:

http://www.afcesa.af.mil/Directorate/CEX/Fire/default.html

AND WORCE CIVIL BUGINESH SUFFICIENT, WISHING,

PHONE: (850) 283-6150

DSN 523-6150

FAX: (850) 283-6390

DSN 523-6390

For technical order improvements, correcting procedures, and other inquiries, please use the above media most convenient.

SEGMENT 11 INFORMATION CHANGE NOTICE

This page is provided to notify the user of any informational changes made to Technical Order 00-105E-9 in this Segment and the current Revision. Informational changes will be referenced in the Adobe Reader's Bookmark tool as a designator symbol illustrated as a <[C]> for quick reference to the right of the affected aircraft. The user shall insure the most current information contained in this TO is used for his operation. Retaining out of date rescue information can negatively affect the user's operability and outcome of emergencies. If the user prints out pages his unit requires, the user shall print the affected page(s), remove and destroy the existing page(s), and insert the newly printed page(s) in the binder provided for that purpose. A Master of this TO shall be retained in the unit's library for reference, future printing requirements and inspections.

CHAPTER	<u> AIRCRAFT</u>	<u>PAGE</u>	EXPLANATION OF CHANGE
18	737	4,5,6,7,8	Changed composites, emergency access, and added multiple configurations with fuel capacities.
18	777	ALL	Added aircraft materials page and renumbered file.

NOTE

Chapter 18 contains emergency rescue and mishap response information for the following aircraft:

DC-8 DC-9 MD-80 MD-90 DC-10 MD-11 L-1011-1 L-1011-500 707 720 727 737 747 757 767 777

CHAPTER 18

COMMERCIAL/CIVIL RESERVE AIRFLEET(CRAF)

AEROSPACE EMERGENCY RESCUE AND MISHAP RESPONSE INFORMATION

18-1. INTRODUCTION AND USE.

18-2. This section contains emergency rescue and mishap response information illustrations in alphanumerical order relative to type and model of aircraft. This arrangement of illustrations is maintained from Chapter 4 throughout the remainder of the publication.

18-3. GENERAL ARRANGEMENT.

- 18-4. Aircraft type designation has been positioned in the upper right corner of the horizontal illustration for rapid identification. Additional aids to rapid orientation are:
- a. Recent technological advances in aviation have caused concern for the modern firefighter. Aircraft hazards, cabin configurations, airframe materials, and any other information that would be helpful in fighting fires, the locating and rescue of personnel will be added as the information becomes available.

- b. Suggested special tools/equipment are listed in the upper left corner, on the Aircraft/Entry page of each listed aircraft.
- c. Procedural steps covering emergency/ normal entrances, cut-ins, engine/APU shutdown, safetying ejection/escape systems, and aircrew extraction are outlined on the left side of each page with coordinated illustrations on the right.
- d. Illustrations located on right side of pages are coordinated with text by numerals and small letters depicting both paragraph and subparagraph on the page.
- e. Each illustration is consistently colored and/or pattern keyed to highlight essential emergency rescue information.
- f. Details are pulled directly from the illustration to highlight an area, thus eliminating unnecessary searching for desired information.

SPECIAL TOOLS/EQUIPMENT Power Rescue Saw 35 Foot Ladder

AIRCRAFT ENTRY-STRETCHED VERSION

- 1. NORMAL/EMERGENCY ENTRY
- a. OVERWING ESCAPE HATCHES, both sides. To open, push in on plate to unlock, push inward and lift upward.
- b. LEFT FORWARD AND AFT ENTRY
 DOOR. To open, pull handles out, rotate
 counterclockwise, push front door edge in,
 pulling rear edge out and swing door forward.
- c. RIGHT FORWARD AND AFT SERVICE DOOR. To open, pull handles out, rotate clock-wise, push rear door edge in, pulling front edge out and swing door forward.
- d. EMERGENCY EXIT DOOR. To open, pull handle, located top center of door, down and door lowers to open position.

NOTE:

Doors are hinged at bottom edge.

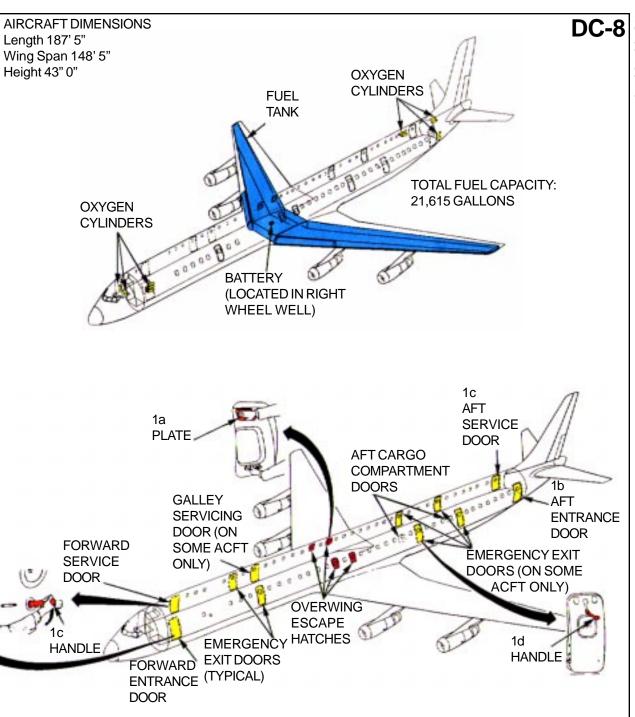
WARNING

When doors are opened from outside, slide chutes automatically deploy. An opening door could injure rescue personnel

1b

HANDLE

- 2. CUT-IN
- a. Cut along window line as a last resort.



Г.О. 00-105E-9

.O. 00-105E-9

ENGINE SHUTDOWN AND AIRCREW EXTRACTION

- 1. ENGINE SHUTDOWN
- a. Retard fuel control levers, located on center console, to full aft OFF position.
- b. Retard throttles, located on center console, to IDLE START position.
- c. Place battery switch, located on upper left corner of flight engineer's panel, to OFF position.

NOTE:

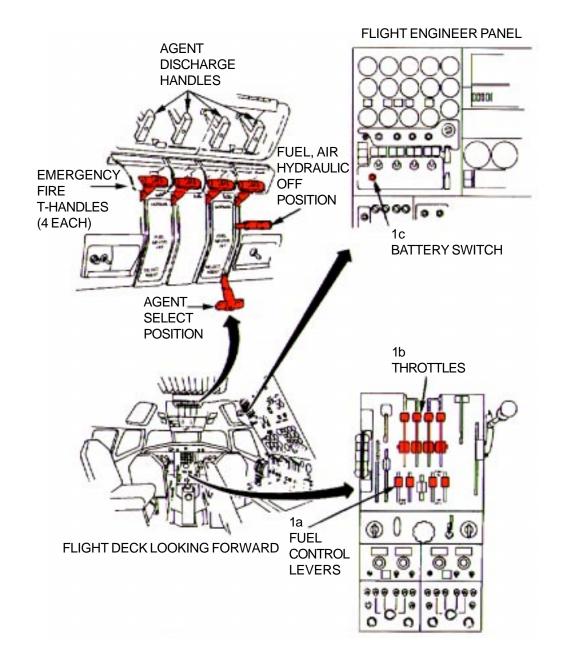
If engines fail to shutdown, pull emergency fire T-handles, located on center overhead panel.

This type aircraft is not equipped with an APU.

- 2. AIRCREW EXTRACTION
- a. Unlatch lap belt and remove shoulder harness form crewmember(s).
- b. Passenger seats are equipped with lap belts only.

NOTE:

If seat tracks are not damaged during crash landing, use adjustable seat control to retract seats to aft position.

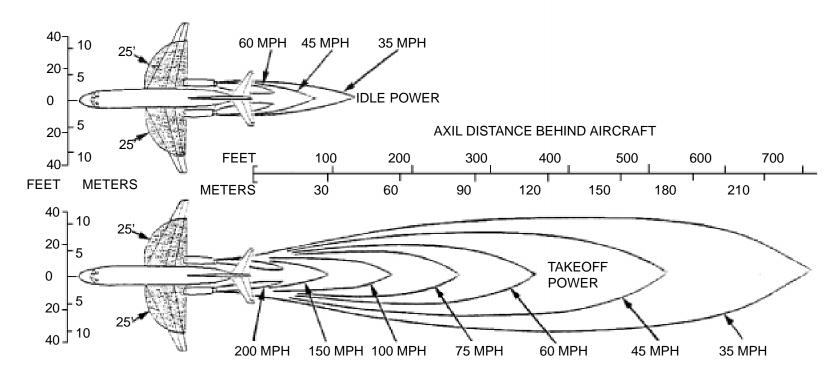


Length 119'3.5" Wing Span 93' 5" Height 27' 6"



ENGINE INTAKE DANGER AREA





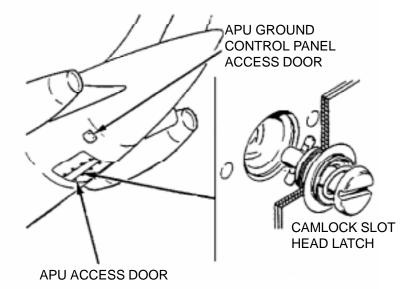
AIRCRAFT DANGER AREAS

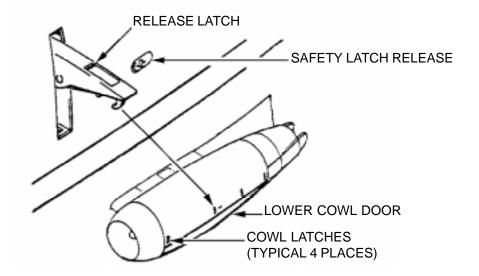
APU ACCESS DOORS AND ENGINE NACELLE LOWER COWL DOOR

WARNING

Use extreme caution when opening access areas where fire is evident.

- 1. APU ACCESS DOORS
- la. Insert screwdriver or similar tool into slot of camlock fasteners.
- b. Turn fasteners to the left to open
- c. Pull down access doors.
- 2. ENGINE NACELLE LOWER COWL **DOOR**
- a. Release four (4) latches on upper cowl door.
- b. Push in safety latch release while holding door up with one hand.
- c. Lower door to full open position.





Power Rescue Saw 12 Foot Ladder

Fire Drill II

AIRCRAFT ENTRY

1. NORMAL ENTRY

CAUTION

When doors are opened from outside, slide chutes automatically deploy.

- Pull handle, located on left forward entry door, out, rotate counterclockwise and pull door outward.
- Pull stairway handle, located forward left bottom side of fuselage, outward, press the open button to extend stairway.
- Pull handle, located on right forward service door, out, rotate clockwise and pull door outward.

2. EMERGENCY ENTRY

WARNING

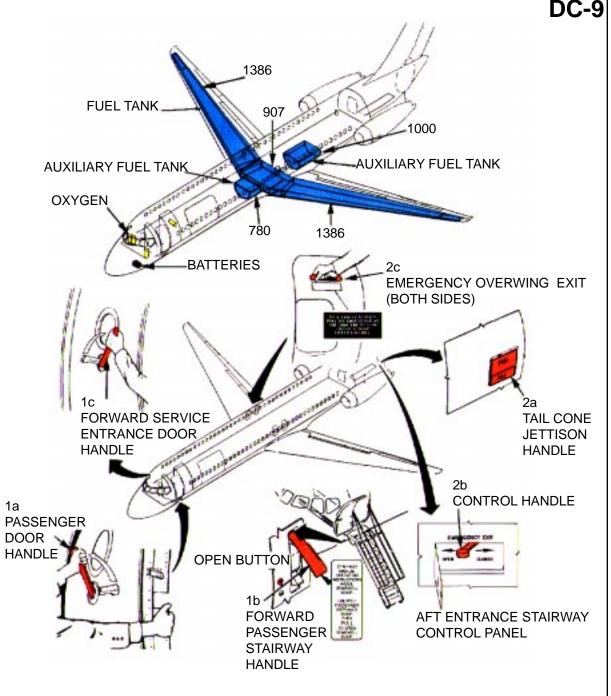
Caution must be exercised when releasing tail cone. Keep personnel clear. Tail cone free falls when released from aircraft.

- a. Push in jettisonable tail cone T-handle door, located on left fuselage forward of tail cone, pull T-handle to jettison tail cone. Jettison door is approximately 8.5 feet high.
- Open rear stairway control panel, located on aft left exterior fuselage, push control handle to forward OPEN position to release stairway.

CAUTION

Stairway free falls to down position.

 Push overwing exit door handle release, two doors are located over each wing, pull handle to unlatch door, push in and lift up forcibly.



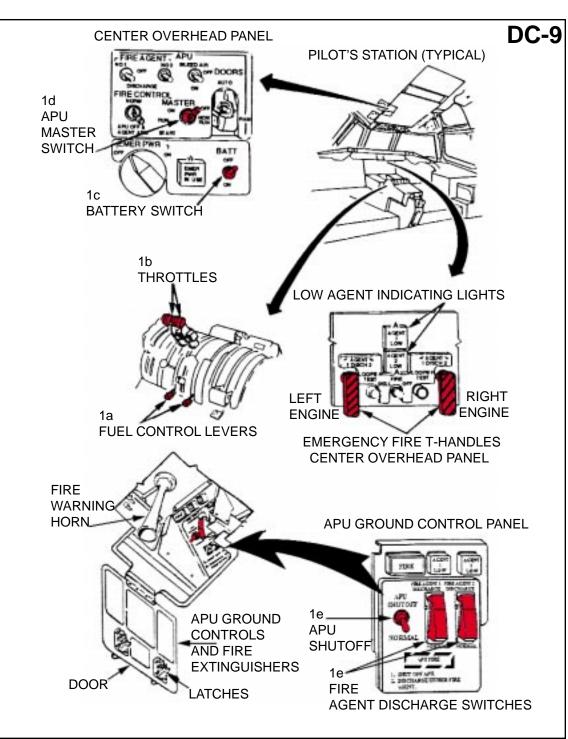
ENGINE/APU SHUTDOWN AND AIRCREW EXTRACTION

- 1. ENGINE/APU SHUTDOWN
- a. Place fuel control levers, located on pilot's center console, to aft and OFF position.
- Retard throttles, located on pilot's center console, to IDLE CUTOFF position.
- Place battery switch, located on center over-head panel, to OFF position.

NOTE:

If engines fail to shutdown, pull emergency fire T-handles out, located on pilot's center forward panel.

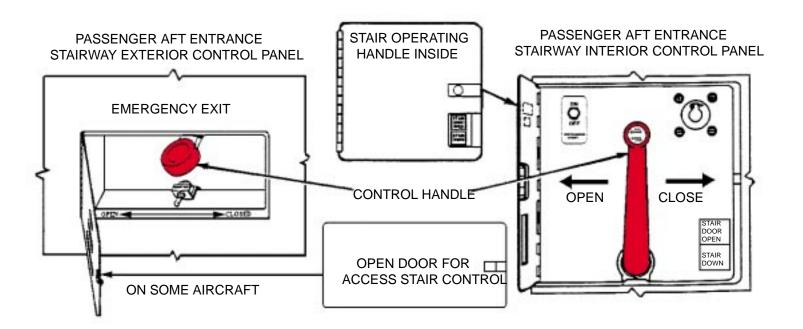
- d. Place APU master switch, located on center overhead panel, to OFF position.
- e. On the APU ground control panel, located to left of APU access doors on the tailcone, open door by pushing two latches. Place APU master switch to the APU shutoff (up) position. If "Fire" light is illuminated ...place discharge fire switch (up) position to release fire agent 1. Wait 10 seconds to use fire agent 2, if applicable.
- 2. AIRCREW EXTRACTION
- Unlatch lap belt and remove shoulder harness from crewmember.
- b. If seat tracks are not damaged during crash landing, use adjustable seat controls to retract seat to aft position.
 Pilot's controls are on right side of seat while co-pilot's are on the left.
- c. Flight crew cabin seats are equipped with lap belts and shoulder harnesses.
- d. Passenger seats are only equipped with lap belts.



AFT PASSENGER DOOR STAIRWAY INTERIOR AND EXTERIOR CONTROLS

NOTE:

- For manual stairway operation, hold interior or exterior control handle in open position. Stairway will free fall open.
- Interior control handle is removed on some aircraft making the stairway inoperable from the inside.



INTERIOR VIEW

AIRCRAFT EMERGENCY EXITS-Continued

PRESSURE BULKHEAD EMERGENCY EXIT, TAILCONE JETTISON, AND MAIN CARGO DOOR OPERATION

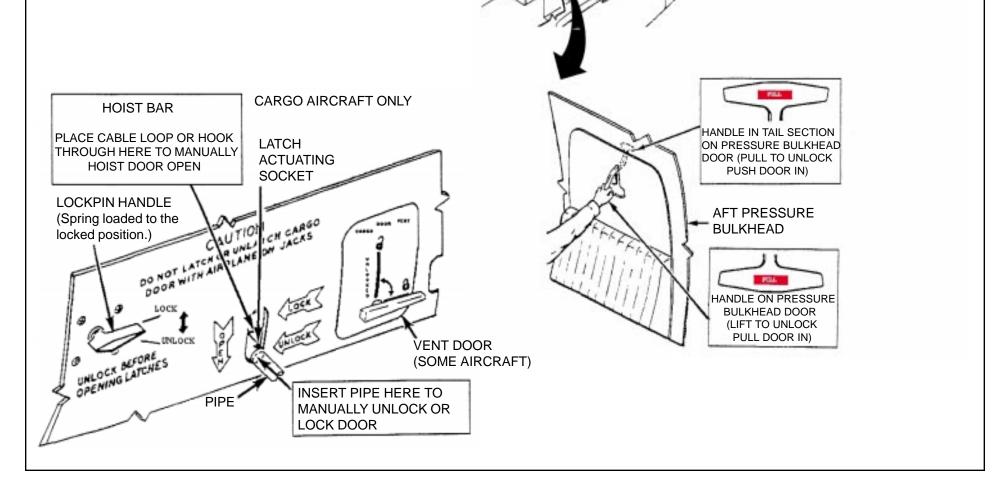
MAIN CARGO DOOR (IF APPLICABLE)

NOTE:

Use only when all other exits are blocked and time permits.

MANUAL LATCH CONTROLS

- a. If installed, turn vent door handle to the UNLOCKED position.
- b. Turn lockpin handle to UNLOCK and hold.
- c. Insert pipe in latch fitting and move to UNLOCK.
- d. Release spring loaded lockpin handle.



ON SOME

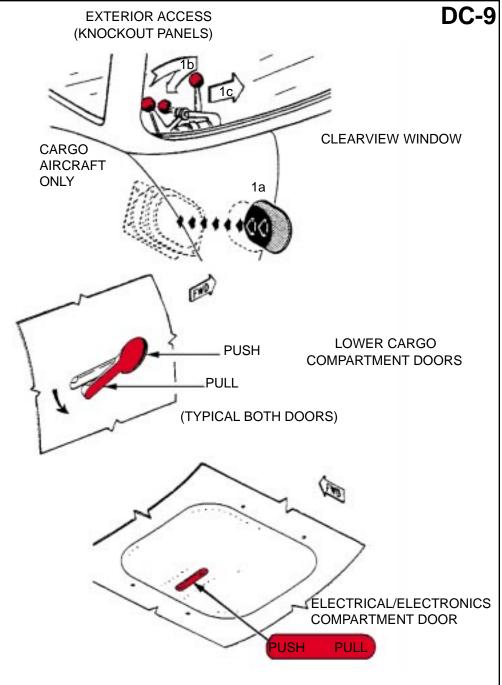
AIRCRAFT

PULL AND TUR OPEN

> VIEWING WINDOW

AIRCRAFT EMERGENCY EXITS

- 1. CLEARVIEW WINDOW FOR CARGO AIRCRAFT ONLY
- la. Push in both access doors.
- b. Push window handle aft, then down.
- c. Push window aft.
- 2. LOWER CARGO COMPARTMENT DOORS
- Push circular section of door handle inward to raise the handle.
- b. Rotate door handle counterclockwise to unlatch door.
- c. Push door upward into cargo compartment.
- 3. ELECTRICAL/ELECTRONIC COMPARTMENT DOOR
- a. Push right side of handle inward and pull left side of handle down to unlatch door.
- b. Push door inward and to the left to open.



AIRCRAFT SKIN PENETRATION POINTS AND GENERAL INFORMATION

GENERAL INFORMATION FOR ALL MODELS The MD-80 Series and variants:

- 1. MD-80 is formerly known as the DC-9 Super 80 or a higher capacity variant of the DC-9. The MD-90 is also a variant, but will discussed in the next section.
- 2. MD-81 is the basic version with improved engines and fuel consumption. Seating for 172 passengers.
- 3. MD-82 increases pay load, range, hot and high performance. Seating for 172 passengers.
- 4. MD-83 extends range. Seating for 172 passengers.
- MD-87 is a short fuselage variant, improved performance package targeting foreign sales. Seating for 139 passengers. Has optional front and rear cargo compartment auxiliary fuel tanks each holding 565 US gallons.
- 6. MD-88 combines JT8D-219 power plant, EFIS cockpit displays, flight management system, on board windshear detection system and increased structural composites. Seating for 142 passengers with a redesigned cabin interior (14 first class/128 couch) with five-abreast and wider aisle.
- 7. MD-80ADV is an advanced variant of basic model.
- 8. MD-80T is a Trunkliner made in China.
- 9. MD-80 Executive Jets are corporate and executive versions of the MD-83 and MD-87 offered. Typical seating for 20 people.
- 10. MD-80, 81, 83, and 88 are externally similar.
- 11. Military variants are the C-9 Nightingale for the USAF and C-9B Skytrain II for the NAVY.

NOTE:

AIRCRAFT DIMENSIONS

TYPICAL MD-87 Length 147' 10" 130' 5" Wing Span 107' 10 1/4" Same Height 30' 2" 31" 2"

NOTE:

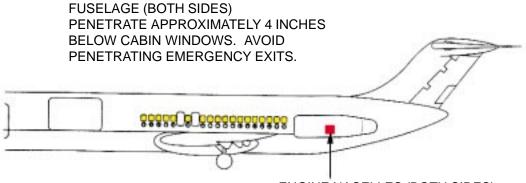
AIRCRAFT STRUCTURE

All metal wing spars, glassfibre trailing edges on wings, ailerons, flaps, elevators, and rudder, and detachable wingtips. Most of cabin floor made of balsa or Nomex core sandwich. Engine pylons by Calcor and fuselage panels by Alenia.



MD-87 SHORT FUSELAGE VARIANT

SKIN PENETRATION POINTS



ENGINE NACELLES (BOTH SIDES)
PENETRATE MID-SECTION OF ENGINE
BELOW ENGINE CENTERLINE

DISTANCE FROM AIRCRAFTLC

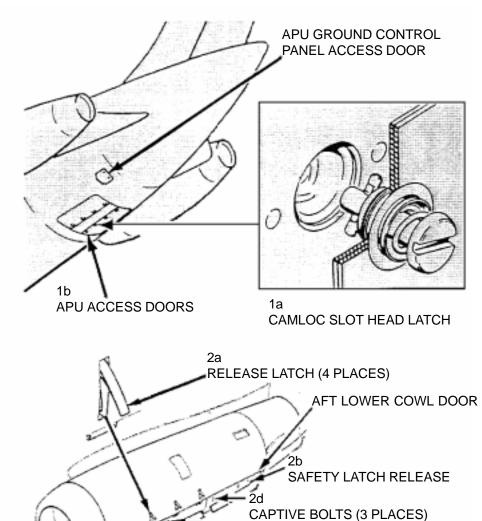
I.O. 00-105E-9

APU ACCESS DOORS AND ENGINE NACELLE LOWER COWL DOOR



Use extreme caution when opening access areas where fire is evident.

- 1. APU ACCESS DOORS
- a. Insert screwdriver or similar tool into slot of camlock fasteners.
- b. Turn fasteners to the left to open.
- c. Pull down access doors.
- 2. ENGINE NACELLE LOWER COWL DOOR
- a. Release four (4) latches on upper cowl door.
- b. Push in safety latch release while holding door up with one hand.
- c. Lower door to full open position.
- d. Remove three (3) captive bolts on aft lower cowl door.
- e. Push in safety latch release while door is up with one hand.
- f. Lower door to full open position.



SAFETY LATCH RELEASE

FORWARD LOWER COWL DOOR

MD-80

Power Rescue Saw

12 Foot Ladder

Fire Drill II

AIRCRAFT ENTRY

1. NORMAL ENTRY_

CAUTION

When doors are opened from outside, slide chutes automatically deploy.

- a. Pull handle, located on left forward entry door, out: rotate counterclockwise and pull door outward.
- b. Pull stairway handle, located forward left bottom side of fuselage, outward, press the open button to extend stairway.
- c. Pull handle, located on right forward service door, out, rotate clockwise and pull door outward.

2. EMERGENCY ENTRY

WARNING

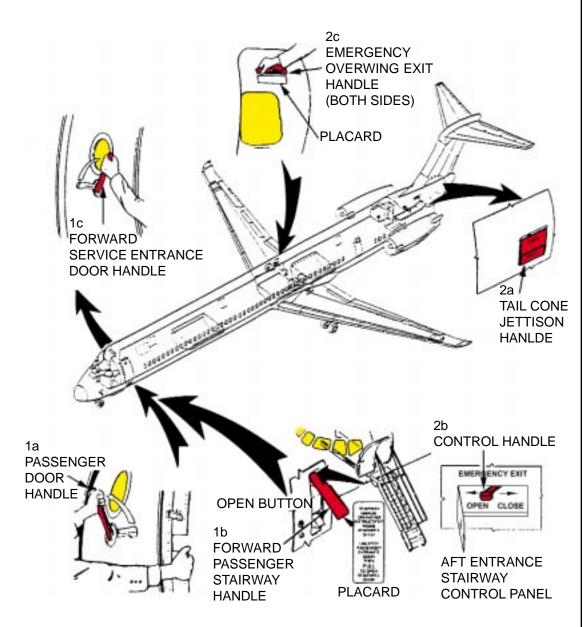
Caution must be exercised when releasing tail cone. Keep personnel clear. Tail cone free falls when released from aircraft.

- a. Push in jettisonable tail cone T-handle door, located on left fuselage forward of tail cone, pull T-handle to jettison tail cone. Jettison door is approximately 8.5 feet high.
- Open rear stairway control panel, located on aft left exterior fuselage, push control handle to forward OPEN position to release stairway.

CAUTION

Stairway free falls to down position. Insure area is cleared of all personnel.

 Push overwing exit door handle release, two doors are located over each wing, pull handle to unlatch door, push in and lift up forcibly.



ELECTRICL/ELECTRONICS COMPARTMENT DOOR

BATTERIES (ELECTRICAL/ELECTRONICS COMPARTMENT)

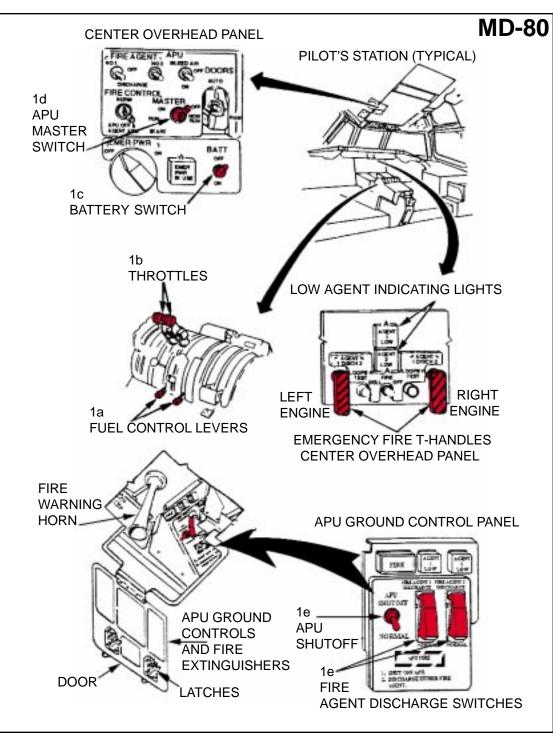
ENGINE/APU SHUTDOWN AND AIRCREW EXTRACTION

- 1. ENGINE/APU SHUTDOWN
- a. Place fuel control levers, located on pilot's center console, to aft and OFF position.
- b. Retard throttles, located on pilot's center console, to IDLE CUTOFF position.
- c. Place battery switch, located on center over-head panel, to OFF position.

NOTE:

If engines fail to shutdown, pull emergency fire T-handles out, located on pilot's center forward panel.

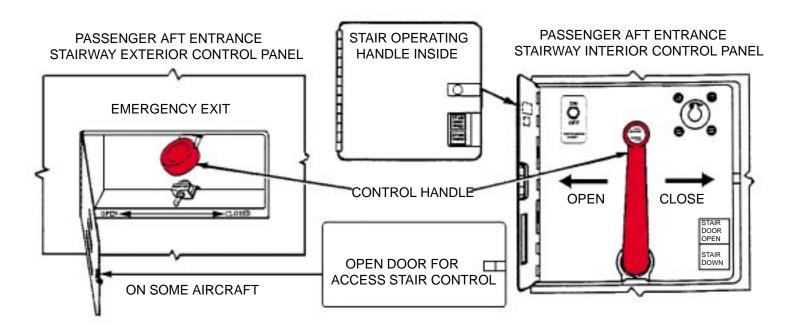
- d. Place APU master switch, located on center overhead panel, to OFF position.
- e. On the APU ground control panel, located to left of APU access doors on the tailcone, open door by pushing two latches. Place APU master switch to the APU shutoff (up) position. If "Fire" light is illuminated ...place discharge fire switch (up) position to release fire agent 1. Wait 10 seconds to use fire agent 2, if applicable.
- 2. AIRCREW EXTRACTION
- a. Unlatch lap belt and remove shoulder harness from crewmember.
- b. If seat tracks are not damaged during crash landing, use adjustable seat controls to retract seat to aft position.
 Pilot's controls are on right side of seat while co-pilot's are on the left.
- c. Flight crew cabin seats are equipped with lap belts and shoulder harnesses.
- d. Passenger seats are only equipped with lap belts.



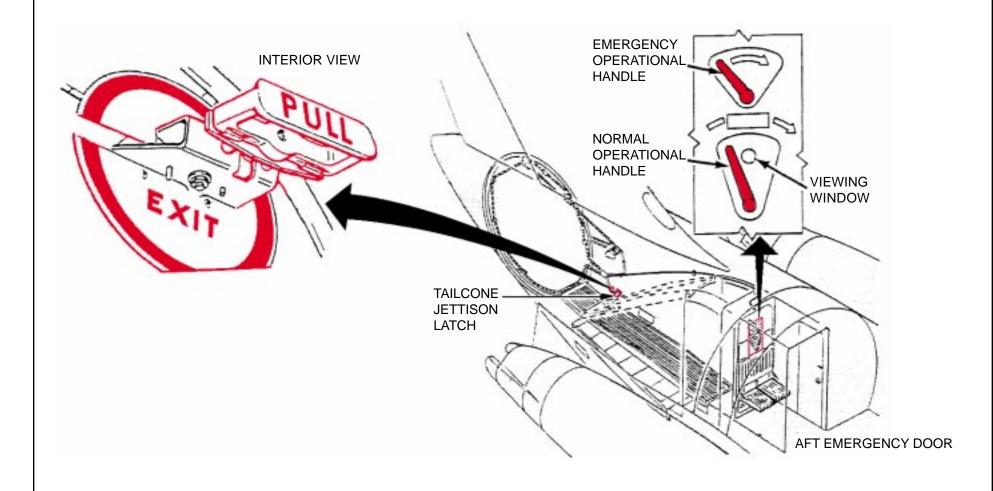
AFT PASSENGER DOOR STAIRWAY INTERIOR AND EXTERIOR CONTROLS

NOTE:

- For manual stairway operation, hold interior or exterior control handle in open position. Stairway will free fall open.
- Interior control handle is removed on some aircraft making the stairway inoperable from the inside.



AFT EMERGENCY DOOR AND TAILCONE JETTISON

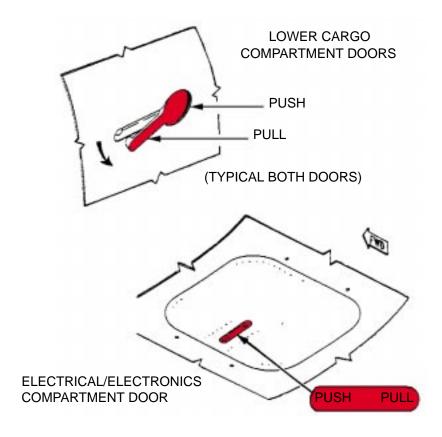


MD-80

1. LOWER CARGO COMPARTMENT DOORS

MD-80.9

- a. Push circular section of door handle inward to raise the handle.
- b. Rotate door handle counterclockwise to unlatch door.
- c. Push door upward into cargo compartment.
- 2. ELECTRICAL/ELECTRONIC COMPARTMENT DOOR
- a. Push right side of handle inward and pull left side of handle down to unlatch door.
- b. Push door inward and to the left to open.



MD-90

AIRCRAFT SKIN PENETRATION POINTS AND GENERAL INFORMATION

GENERAL INFORMATION FOR ALL MODELS The MD-90 Series and variants:

- 1. MD-90 is a stretched MD-80 follow on, powered by IAE V2300 turbofans.
- MD-90-30 has a MD-80 fuselage lengthened by 4 ft. 9 in. ahead of the wing; same enlarged tail surfaces as MD-87; powered elevators. Seating for 153 two-class passengers, 5 abreast: maximum 172 passengers limited by exit doors and hatches; two IAE V2525-D5 turbofans.
- 3. MD-90-30T: Trunkliner made in China.
- 4. MD-90-50 is an extended version of MD-90-30 for 153 passengers; two IAE V2528-D5 turbofans.
- 5. MD-90-55 is similar to MD-90-50 but with an extra pair of doors in forward fuselage section to allow maximum 187 charter class passengers.
- MD-95 is a short version variant as the MD-87. Seating 124 all tourist or 12 first class/ 93 tourist or 80 business class/15 tourist configurations. Two Pratt & Whitney JTD-200 or Rolls-Royce Tay turbofans.

NOTE:

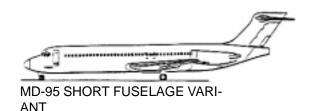
AIRCRAFT DIMENSIONS

TYPICAL MD-95 Length 152' 7" 122' 6" Wing Span 107' 10" Same Height 30' 71/4" 30' 8"

NOTE:

AIRCRAFT STUCTURE

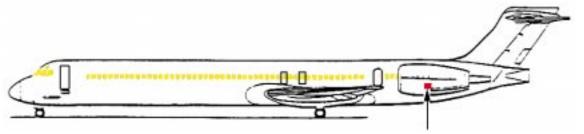
(Same structure as late MD-80.) All metal wing spars, glassfibre trailing edges on wings, ailerons, flaps, elevators, rudder, and detachable wing tips. Most of cabin floor made of balsa or Nomex core sandwich. Engine pylons by Calcor and fuselage panels by Alenia.



SKIN PENETRATION POINTS

Fuselage (both sides)
Penetrate approximately 4 in

Penetrate approximately 4 inches below cabin windows. Avoid penetrating emergency exits.



ENGINE NACELLES (BOTH SIDES)
PENETRATE MID-SECTION OF ENGINE
BELOW ENGINE CENTERLINE

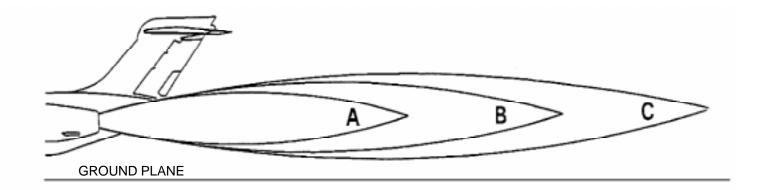
ENGINE DANGER AREAS

JET INTAKE AND BLAST DISTANCES

NOTE:

- These contours are to be used as guidelines only since the operational environment varies greatly - operational varies greatly-operated safety aspects are the responsi bility of the user/planner.
- · All velocity values are statute miles per hour.
- · Cross winds will have considerable effect on contours.
- · Sea level static-standard day-zero ramp gradient.

		AFT L	IMIT OF	ZONE
		Α	В	С
(S WIND VELOCITY	TATUTE MPH)	300	100	60
TAKEOFF	FEET	31	178	375
POWER	METERS	11	54	114
BREAKAWAY	FEET	NA	35	78
POWER	METERS	NA	11	24
	FEET	NA	30	50
IDLE POWER	METERS	NA	9	15



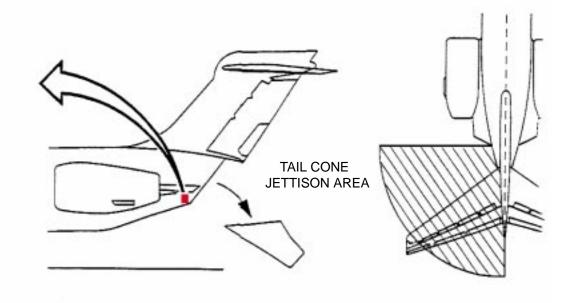
- Handle is 10 feet (3 meters) above ground.
- Slide inflates automatically.

EMERGENCY EXIT

FOR TAIL CONE JETTISON PUSH DOOR PULL HANDLE



INSIDE LOCK CABLE
MUST BE RE-INSTALLED
IF HANDLE IS PULLED



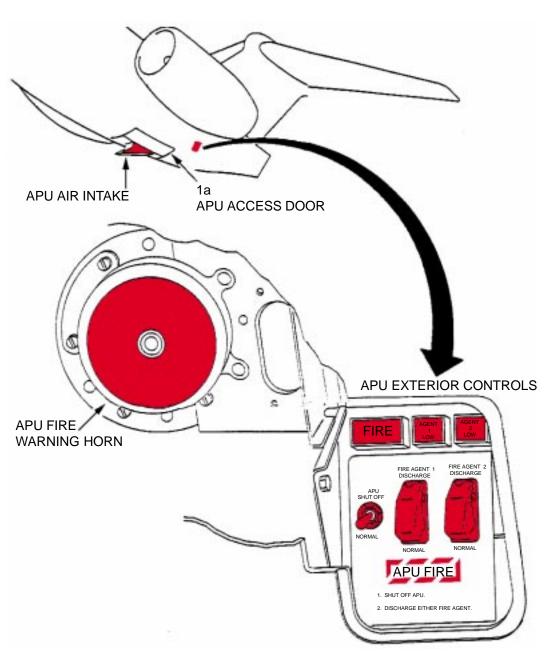
AIRCRAFT DANGER AREAS-Continued

APU ACCESS DOORS AND APU EXTERIOR CONTROLS

WARNING

Use extreme caution when opening access areas where fire is evident.

- 1. APU ACCESS DOORS
- a. Insert screw driver or similar tool into slot of camlock fasteners.
- b. Turn fasteners to the left to open.
- c. Pull down access doors.
- 2. APU EXTERIOR CONTROLS
- a. Shut off APU by pressing the APU SHUT OFF/NORMAL switch UP.
- If FIRE warning light is illuminated indicating APU fire, flip toggle switch cover up, select FIRE AGENT 1 switch and press UP to discharge fire agent.
- c. If FIRE light remains illuminated, repeat step a by selecting FIRE AGENT 2 switch. FIRE light will go out if fire is extinguished.
- d. If fire is not extinguished, access APU through air intake, skin penetration, or other means available.



SPECIAL TOOLS/EQUIPMENT Power Rescue Saw 35 Foot Ladder

TOTAL FUEL CAPACITY: 5.840 GALLONS (FUEL IN WINGS ONLY)

AIRCRAFT ENTRY

Fire Drill II

- NORMAL/EMERGENCY ENTRY
- a. OVERWING ESCAPE HATCHES, both sides, 4 places. To open, pull exterior handle, push inward at bottom and lift upward.



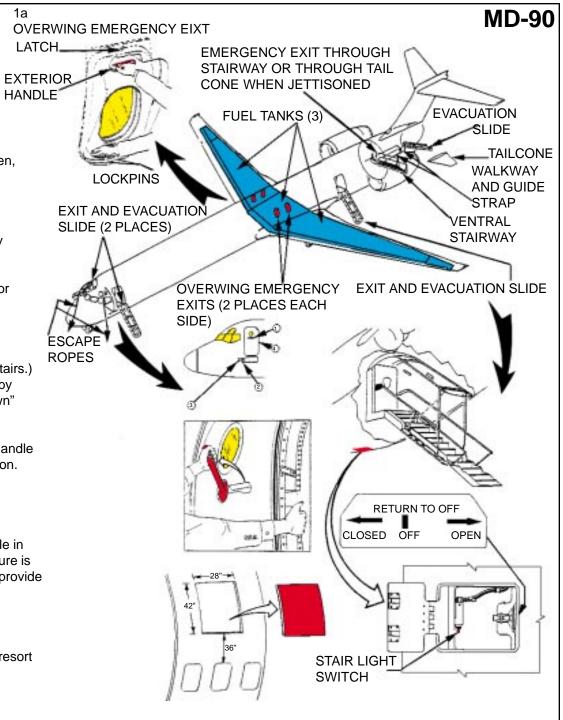
When doors are opened from outside, slide chutes automatically deploy. An opening door could injure rescue personnel.

- b. LEFT FORWARD PASSENGER/SERVICE DOOR (Only left door has stair.) To open, using a ladder, (1) pull door handle out, (2) rotate counterclockwise, (3) push front door edge in, (4) pulling rear edge out and (5) swing door forward.
- c. LEFT FORWARD PASSENGER/SERVICE DOOR (Deploying stairs.) (1) Pull door handle out and open slightly, (2) unlatch stair door by turning and holding battery switch "ON", press and (3) hold "down" button until stair fully extends, and (4) open door fully.
- d. RIGHT FORWARD EMERGENCY EXIT DOOR To open, pull handle down, located top center of door, and door lowers to open position.

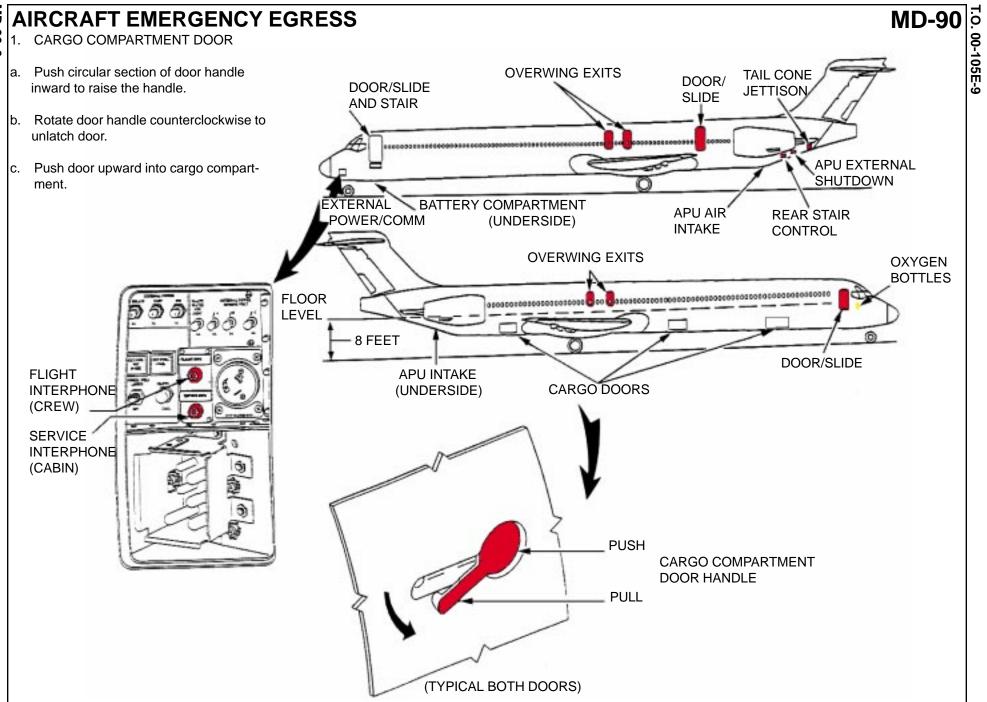
NOTE:

Doors are hinged at bottom edge.

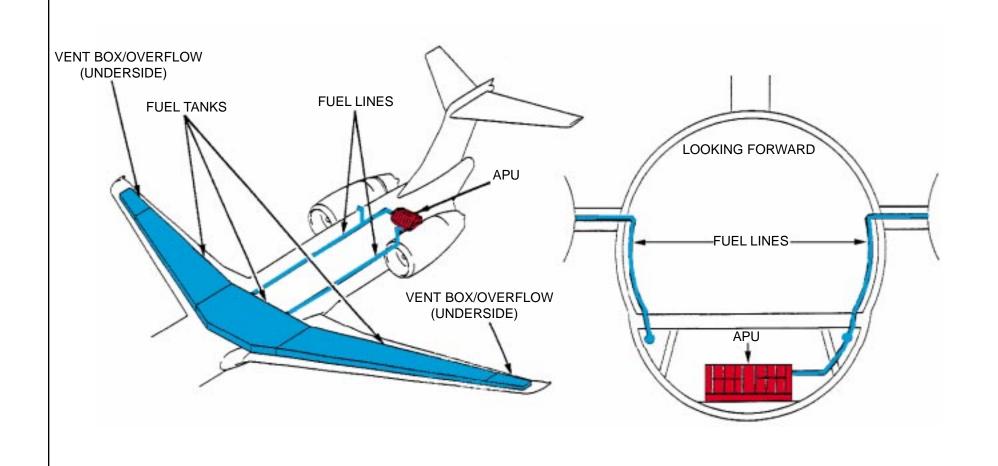
- e. PASSENGER AFT ENTRANCE DOOR AND STAIR Hold handle in "OPEN" position until stair is lowered. If aircraft hydraulic pressure is "OFF", manually pull stair to maximum travel. Accumulator will provide initial movement.
- 2. CUT-IN
- a. Cut 36" above any window with a cut out of 42" by 28" as a last resort to evacuate smoke and passengers.



AIRCRAFT EMERGENCY EGRESS



MD-90 T.O. 00-105E-9



MD-90

.O. 00-105E-9

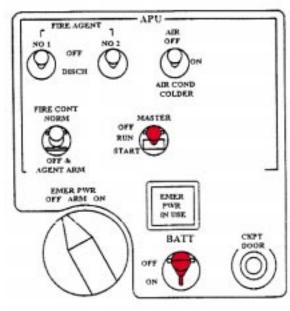
ENGINE/APU SHUTDOWN AND AIRCREW EXTRACTION

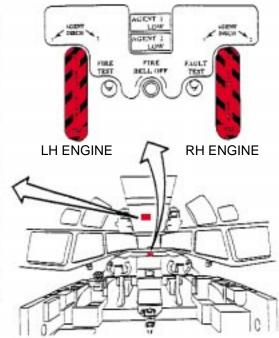
- 1. ENGINE/APU SHUTDOWN
- a. Place fuel control levers, located on pilot's center console, to aft and OFF position.
- b. Retard throttles, located on pilot's center console, to IDLE CUTOFF position.
- c. Place battery switch, located on center overhead panel, to OFF position.

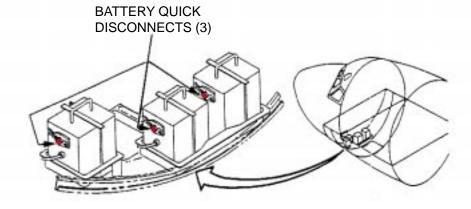
NOTE:

If engines fail to shutdown, pull emergency fire T-handles out, located on pilot's center forward panel.

- d. Place APU master switch, located on center overhead panel, to OFF position.
- e. On the APU ground control panel, located to left of APU access doors on the tail cone, place APU master switch to the APU shutoff position. Discharge fire agent 1 and/ or 2 as applicable.
- 2. AIRCREW EXTRACTION
- a. Unlatch lap belt and remove shoulder harness from crewmember(s).
- b. If seat tracks are not damaged during crash landing, use adjustable seat controls to retract seat to aft position. Pilot's controls are on right side of seat while co-pilot's are on the left.
- c. Flight crew cabin seats are equipped with lap belts and shoulder harnesses.
- d. Passenger seats are only equipped with lap belts.







DC-10

T.O. 00-105E-9

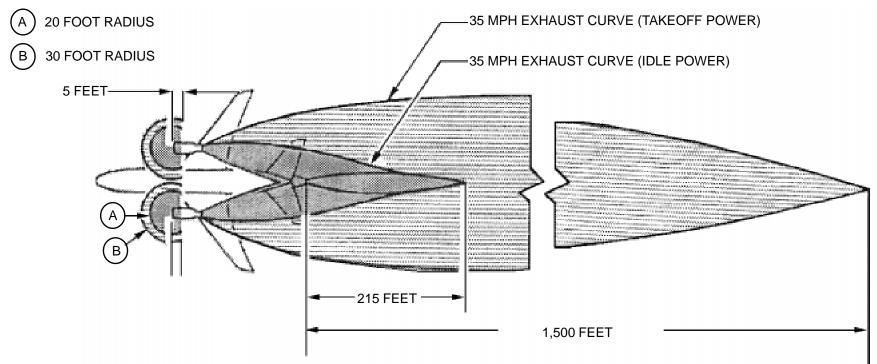
Crosswinds will have considerable effect on contours.



IDLE POWER



TAKEOFF POWER



VIEW LOOKING UP FROM BOTTOM OF AIRCRAFT

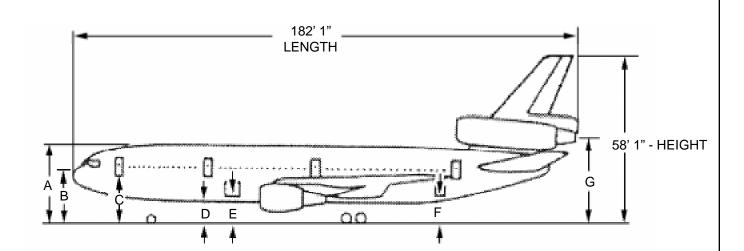
AIRCRAFT GROUND CLEARANCES AND DIMENSIONS

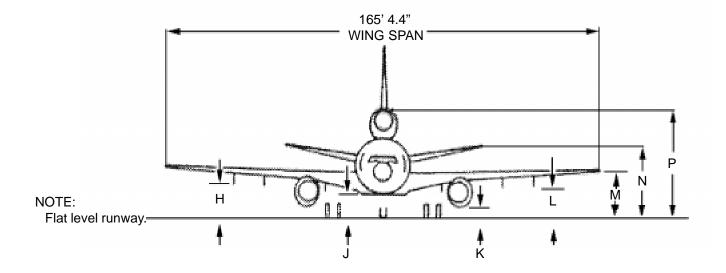
DC-10

T.O. 00-105E-9

VERTICAL CLEARANCE MEASUREMENTS ARE APPROXIMATE

LOCATION	FEET
Α	27
В	17
С	16
D	8
E	10
F	10
G	31
Н	11
J	8
K	3
L	10
М	16
N	25
Р	38

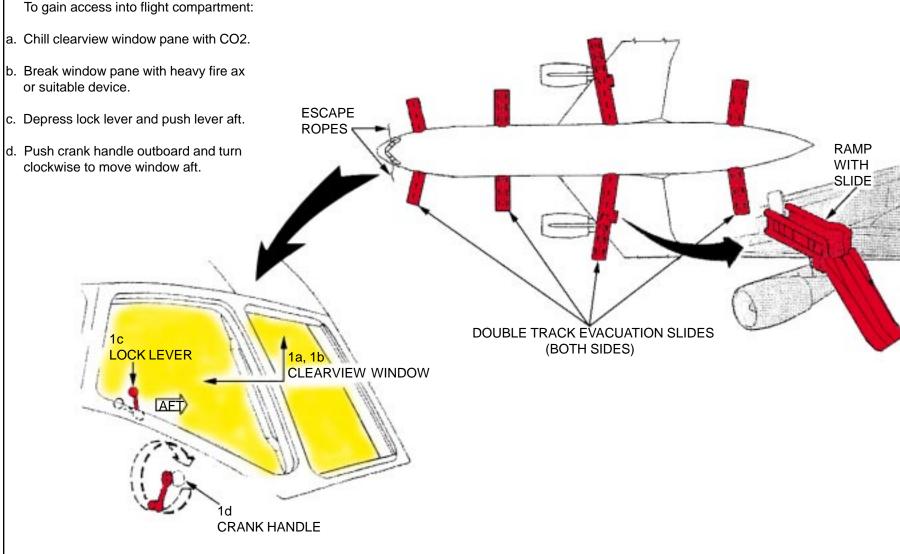




DC-10

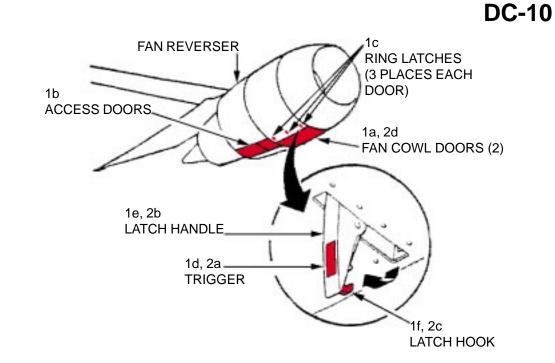
AIRCRAFT EVACUATION ROUTES AND CLEARVIEW WINDOW ENTRY

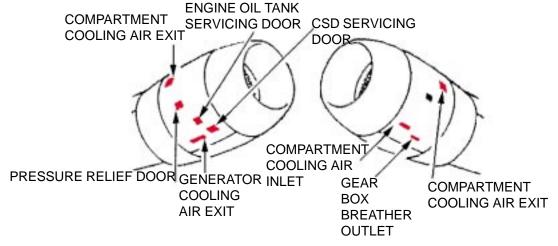
CLEARVIEW WINDOW ENTRY
 To gain access into flight compartment:



ENGINE NACELLE DOORS AND FAN COWL ACCESS DOORS

- 1. ENGINE NACELLE DOORS To open fan reverser:
- a. Open fan and core cowl doors.
- b. Open blowout and lower latch access panel doors on bottom of reverser.
- c. Release forward mounting ring latches on each side of reverser.
- d. Press trigger on door tension latch handle to release handle.
- e. Pull handle to fully unlatched position.
- f. Disengage latch hook from u-bolt.
- g. Insert speed handle or nut runner into flexshaft socket and crank reverser half open.
- 2. TO OPEN FAN AND CORE COWL DOORS
- a. Press trigger on door tension latch handle to release handle.
- b. Pull handle to fully unlatched position.
- c. Disengage latch hook from u-bolt.
- d. Raise door to open position and engage hold-open rods with engine fittings.





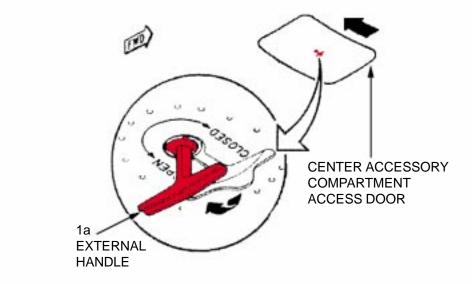
DC-10

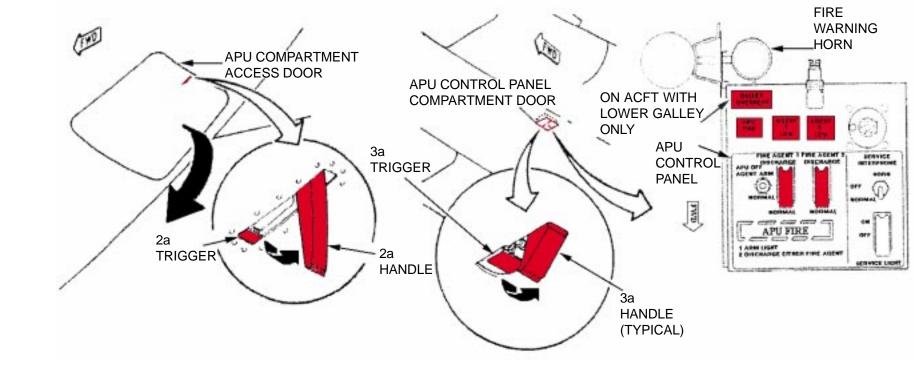
AIRCRAFT ACCESS DOORS

- 1. CENTER ACCESSORY COMPARTMENT DOOR
- a. Pull down external handle and rotate in direction indicated by placarding on door.
- b. Stow handle and slide door to right side of fuselage.
- 2. APU ACCESS DOOR
- a. Press trigger to release handle.
- b. Support door after unlatching.
- c. Door opens down.

DC-10.5

- 3. APU GROUND CONTROL PANEL COMPARTMENT DOOR
- a. Press three (3) triggers on door to release three handles.
- b. Door opens down.





SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw

35 Foot Ladder

1/4 Inch Drive Tool

Fire Drill II

AIRCRAFT ENTRY

WARNING

When emergency mode is used to open any passenger door, door will automatically move to full open position.

- 1. OPERATION OF ALL 8 DOORS WITH NON PUSH BUTTON TYPE: NORMAL MODE-ELECTRICAL
- a. Pull door control handle out of recess.
- b. Move handle to open position and hold.
- c. When door is fully open, return handle to neutral detent.

IF DOOR DOES NOT OPEN:

- 2. EMERGENCY MODE-PNUEMATIC (ALL 8 DOORS)
- a. Hold door control handle at open position.
- Depress and hold emergency opening button, or if emergency override lever is installed, rotate from safe to emergency and hold.
- Move door control handle to emergency position (see dotted PULL handle).

IF DOOR STILL DOES NOT OPEN:

- d. Push door inward as far as possible and hold. For forward doors, push in area of window.
- e. Use any available means to pry door upward.

WARNING

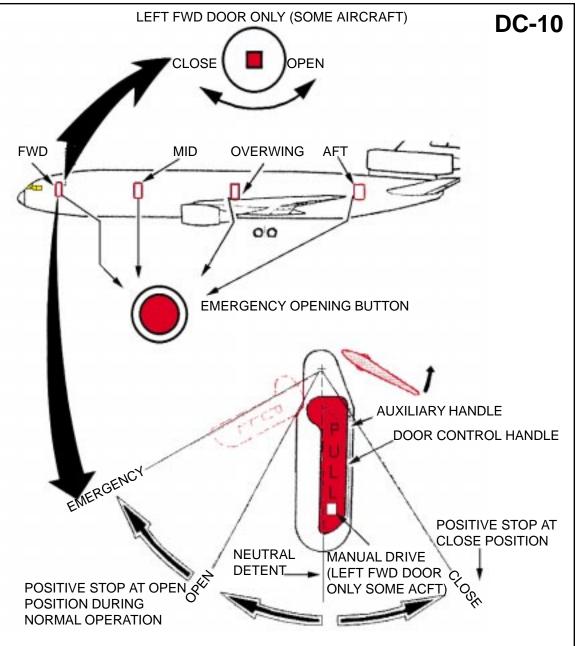
Door with slide attached is very heavy. Required lifting force may exceed 400 pounds.

- 3. AUXILIARY MODE USING 1/4-INCH DRIVE FITTING (Applicable for forward left fuselage door only.)
- a. Hold door control handle at open position.
- b. Insert 1/4-inch drive tool in manual drive fitting and turn counterclockwise until door is open.

CAUTION

Torque applied in excess of 100 inch pounds or 500 RMPs may result in damage.

 Return door control handle to neutral detent and push inward to stow.



DC-10

WARNING

When emergency mode is used to open any passenger door, door will automatically move to full open position.

- 4. OPERATION OF ALL 8 DOORS WITH PUSH BUTTON TYPE: NORMAL MODE-ELECTRICAL
- a. Pull door control handle out of recess to disarm escape slide.
- b. Move door control switch to open and hold.
- c. When door is fully open, release switch.

IF DOOR DOES NOT OPEN:

DC-10.7

- 5. EMERGENCY MODE-PNUEMATIC (ALL 8 DOORS)
- a. Pull door control handle out of fuselage.
- b. Rotate emergency override lever from safe position to emergency position and hold.
- Rotate door control handle to emergency position (see dotted PULL handle).

IF DOOR STILL DOES NOT OPEN:

- d. Push door inward as far as possible and hold. For forward doors, push in area of window.
- e. Use any available means to pry door upward.

WARNING

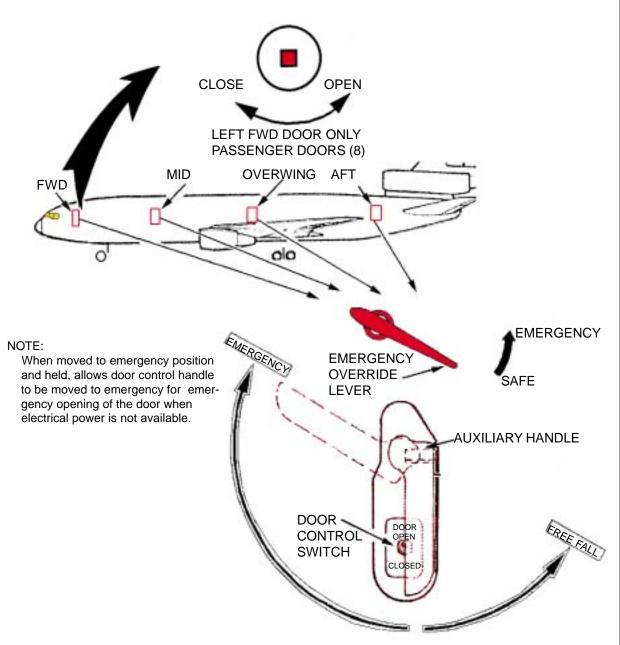
Door with slide attached is very heavy. Required lifting force may exceed 400 pounds.

- AUXILIARY MODE USING 1/4-INCH DRIVE FITTING (Applicable for forward left fuselage door only.)
- a. Pull handle out, rotate to free fall position and hold.
- b. Insert 1/4-inch drive into socket and rotate as indicated until door is open.

CAUTION

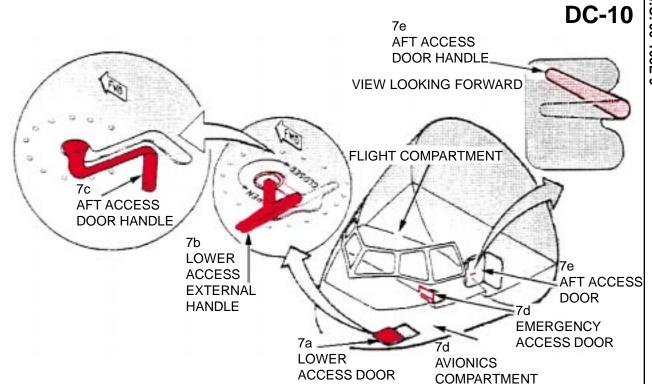
Torque applied in excess of 100 inch pounds or 500 RMPs may result in damage.

c. Release door control handle to neutral position.



AIRCRAFT ENTRY-Continued

- 7. FLIGHT COMPARTMENT ENTRY THROUGH THE AVIONICS COMPARTMENT
- a. To open the avionics compartment lower access door, pull down and turn external handle counterclockwise.
- b. Stow handle and slide door forward.
- c. To open avionics compartment aft access door, turn handle up (clockwise) and push door.
- d. To open avionics compartment emergency access door, push to open into flight compartment.
- e. Use aft access door from passenger compartment to access flight compartment. Rotate handle up to unlock aft access door.



AIRCRAFT ENTRY-Continued

DC-10

9d

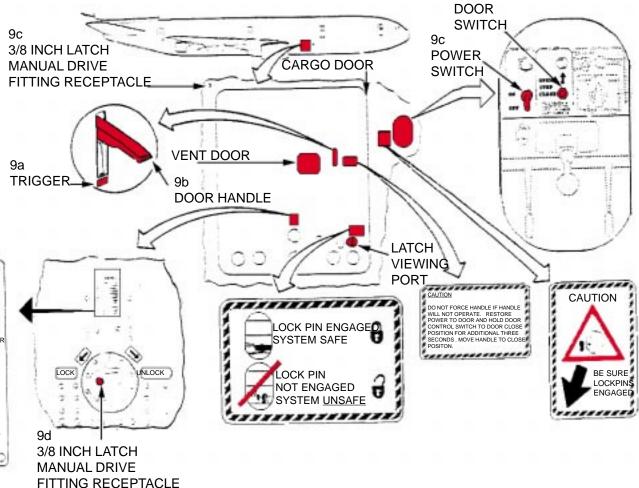
Г.О. 00-105E-9

- 8. EXTERNAL CARGO DOOR OPERATION WITH POWER AVAILABLE
- a. Press trigger to release handle.
- b. Pull handle out and up.
- c. Place door power switch on.
- d. Place door switch to open.

WARNING

To prevent door from springing open, manually crank door actuator to the fully closed position prior to manually unlatching.

- 9. EXTERNAL CARGO DOOR OPERATION WITH MANUAL MODE-NO POWER
- a. Press trigger to release handle.
- b. Pull handle out and up.
- c. Insert drive tool in latch manual drive fitting and turn drive tool toward unlock position until latches are open.
- d. Insert drive tool in door manual drive fitting and turn clockwise until door is open.





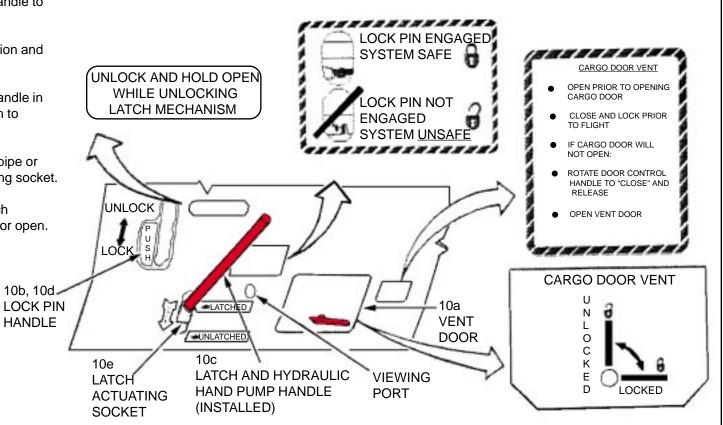
Г.О. 00-105E-9

10. UPPER CARGO DOOR INTERNAL OPERATION CONVERTIBLE FREIGHTER AIRCRAFT ONLY

NOTE:

If installed, pip pin must be removed from locktube to allow unlocking of lockpin handle.

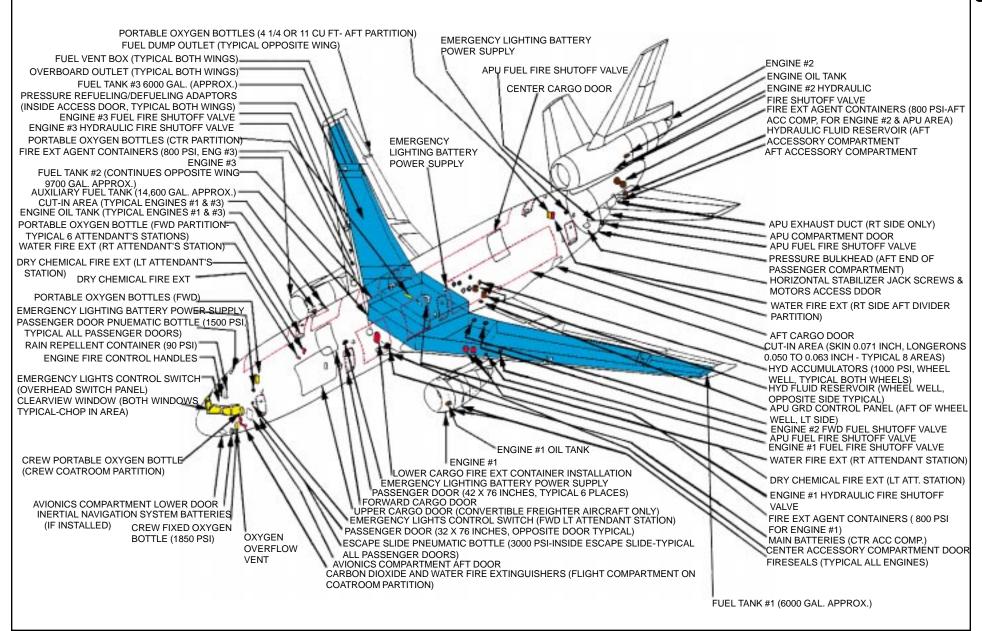
- a. To open manually, rotate vent door handle to unlock position.
- b. Pull lockpin handle up to unlock position and hold.
- c. Insert pipe or hydraulic hand pump handle in latch actuating socket and push down to unlatched position.
- d. Release lockpin handle and remove pipe or hand pump handle from latch actuating socket.
- e. Place cable loop or hook through latch actuating socket to manually hoist door open.



TYPICAL VERSION

1. CUT-IN

Cut along window lines as a last resort. See red highlighted areas for doors and fuselage.



ENGINE SHUTDOWN AND AIRCREW EXTRACTION

- 1. ENGINE SHUTDOWN
- a. Retard throttles, located on pilot's console, full aft position.
- Place fuel control levers, located on pilot's center console, aft and down to full detent.
- c. Place APU fire control switch, located on flight engineer's left panel to OFF position.
- d. Place battery switch, located on flight engineer's upper left panel, to OFF position.

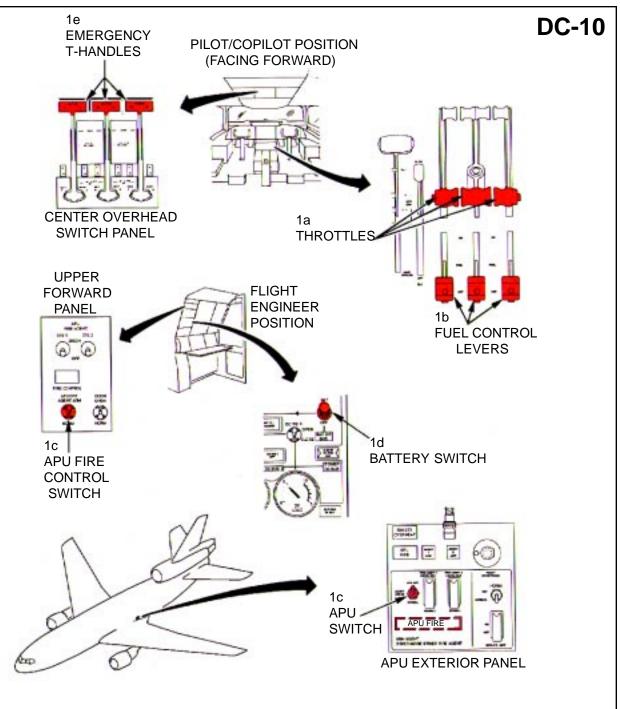
If engines fail to shutdown:

e. Push emergency fire T-handles, located on pilot's overhead panel, forward.

NOTE:

APU can be shut off from ground control panel, located on left wing filet.

- 2. AIRCREW EXTRACTION
- a. Rotate quick release knob on lap belt and remove shoulder harness.
- b. Pull seat manual release handle to adjust seat to a recline position in removing crewmembers.
- c. Passenger seats are equipped with lap belts only.



AIRCRAFT GENERAL INFORMATION

GENERAL INFORMATION FOR ALL MODELS

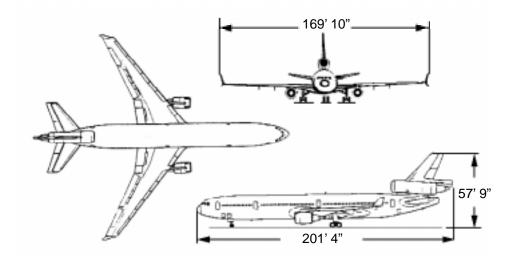
- The MD-11 Series and variants: is a medium/long range DC-10 follow on. Seating for 323 two class passengers and a maximum of 410. Two crew flightdeck. Crew door and three passenger doors each side, all eight of which open sliding inward and upward. Two freight holds in lower deck, forward and aft of wing, and one bulk cargo compartment in rear fuselage. Power plant is three Pratt & Whitney PW4460 turbofans or three General Electric CF6-80C2D1F turbofans.
- 2. MD-11-Combi is a cargo/passenger version. Seating for 168 to 240 passengers and 4 to 10 pallets. Common configuration 214.
- 3. MD-11CF is a convertible freighter. Main deck cargo door at front on port side.
- 4. MD-11F is a all-freighter version.
- MD-11C&D are tentatively planned for increased capacity.

6. AIRCRAFT STRUCTURE

Composites used in virtually all control surfaces, engine inlets and cowlings, and wing/fuselage fillets; wing has two-spar structural box with chordwise ribs and skins with spanwise stifferners; upper winglet of ribs, spars and stiffened aluminum alloy skin with carbonfibre trailing edge; lower winglet carbonfibre; inboard ailerons have metal structure with composites skin; outboard ailerons all composites; inboard flaps composites-skinned metal; outboard flaps all-composites; spoilers aluminum honeycomb and composites skin; tailplane has CFRP trailing edge; and elevators CFRP.

NOTE:

AIRCRAFT DIMENSIONS Length 201' 4" Wing Span 169' 10" Height 57' 9"



JET INTAKE AND BLAST DISTANCES

NOTE:

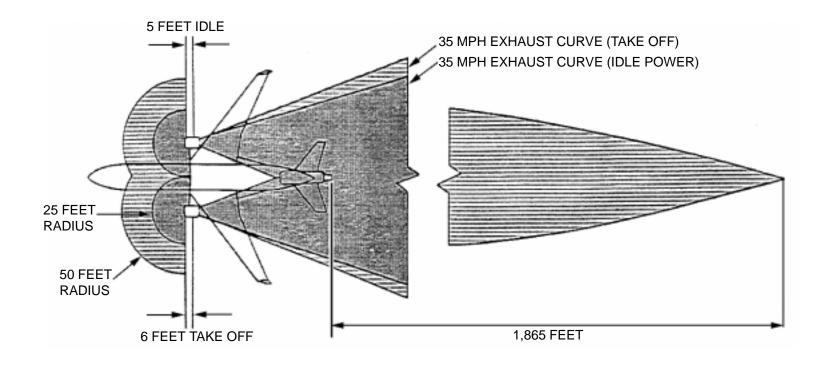
Cross winds will have considerable effect of contours.



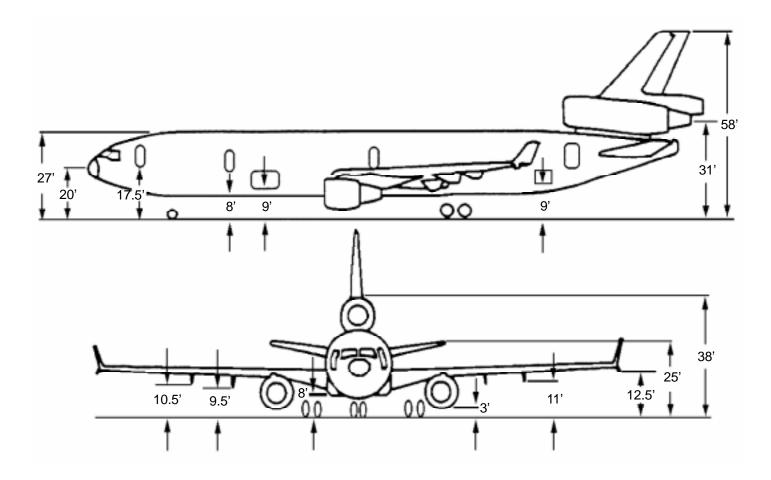
IDLE POWER



TAKE-OFF POWER



Flat level runway. Measurements are approximate.

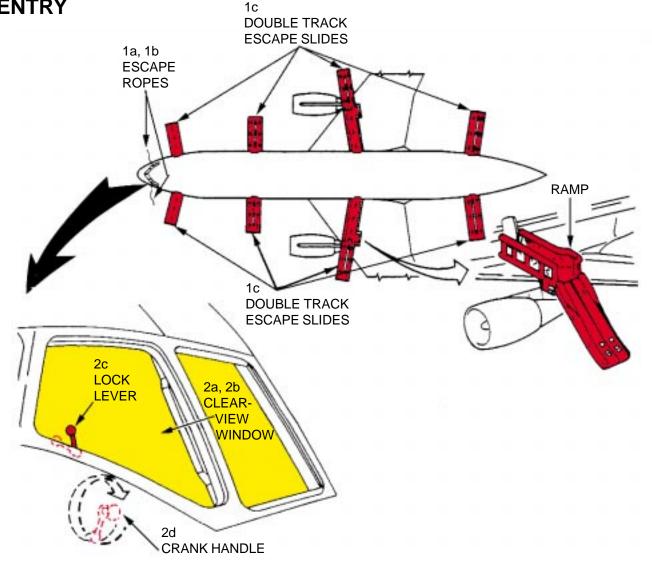


AIRCRAFT EVACUATION ROUTES AND CLEARVIEW WINDOW ENTRY

- 1. EVACUATION ROUTES
- a. Escape ropes are located in the flight compartment.
- Ropes are extended outside of flight compartment windows opposite the pilot and co-pilot.
- c. Escape slides are located at eight locations. (See graphic.)
- d. Flight crewmembers activate the escape slides for rapid passenger egress. Ramps are extensions of the escape slides for over the wings.
- e. Doors opened from the outside will not activate the escape slides, but caution must be exercised to prevent injury to rescue crews. Communication with the flight crew will be necessary, if possible.
- 2. CLEARVIEW WINDOW ENTRY

To gain access into flight compartment:

- a. Chill clearview window panes with CO2.
- b. Break window panes with heavy fire ax or suitable device.
- c. Depress lock lever and push lever aft.
- d. Push crank handle outboard and turn clockwise to move window aft.



ENGINE NACELLE AND FAN COWL ACCESS DOORS

MD-11

PRATT & WHITNEY ENGINES ONLY

- 1. THRUST REVERSER DOORS
- a. Open fan cowl doors.
- b. For wing engines, unlock and release aft door latches.
- c. For tail engine, unlock aft door latch by inserting 3/8 inch (9mm) square drive into fitting in left door. Turn counterclockwise until resistance is felt.
- d. Unlock and release forward door latches.
- e. Open latch access doors at lower center area of doors.
- f. Unlock and release forward and aft tension latches at bottom of doors.
- g. Unlock and release center tension latches.
- h. Connect hydraulic pump to door opening actuator.
- i. Fully open doors using pump.
- j. Release hold-open rods and attach to engine brackets.
- k. Lower doors with pump until supported by rods.

2. WING FAN COWL DOORS

- a. Press latch triggers, pull handle down releasing tension latches.
- b. Lift and support doors at lower edge.
- c. Extend hold-open rods to fully locked position.
- d. Retract knobs of hold open rods and engage hooks on support fittings.

3. TAIL FAN COWL DOORS

- a. Connect hydraulic pump to door opening actuator.
- b. Fully open doors using pump.
- c. Release hold-open rods and attach to engine brackets.
- d. Lower doors with pump until supported by rods.

GENERAL ELECTRIC ENGINES ONLY

- 4. FAN REVERSER
- a. Open cowl door.
- b. Open blowout and lower latch access panel doors on bottom of reverser.
- c. Release forward mounting ring latches on each side of reverser.
- d. Press trigger on door tension latch handle to release handle.
- e. Pull handle to fully unlatched position.
- f. Disengage latch hook from U-bolt.
- g. Connect hydraulic hand pump to quick disconnect fitting on fan reverser. Pump reverser half open.

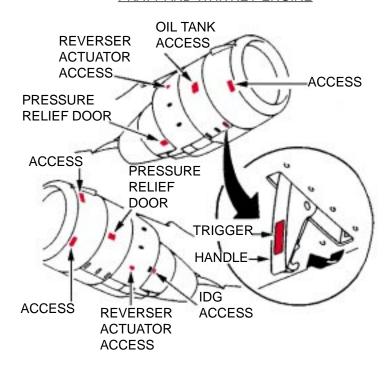
5. FAN AND CORE COWL DOORS

NOTE:

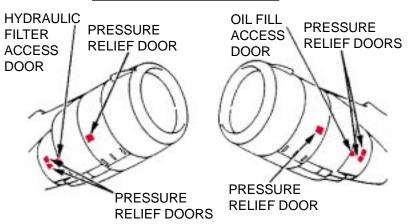
Fan cowl and fan reverser must be opened prior to opening core cowl.

- a. Press trigger on door tension latch handle to release handle.
- b. Pull handle to fully unlatched position.
- c. Disengage latch hook from U-bolt.
- d. Raise door to open position and engage hold-open rods with engine fittings.

PRATT AND WHITNEY ENGINE

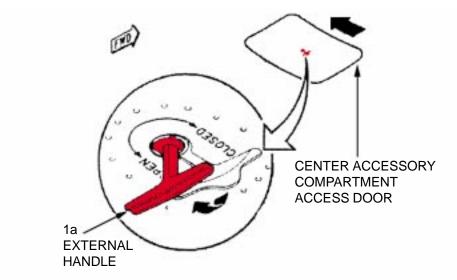


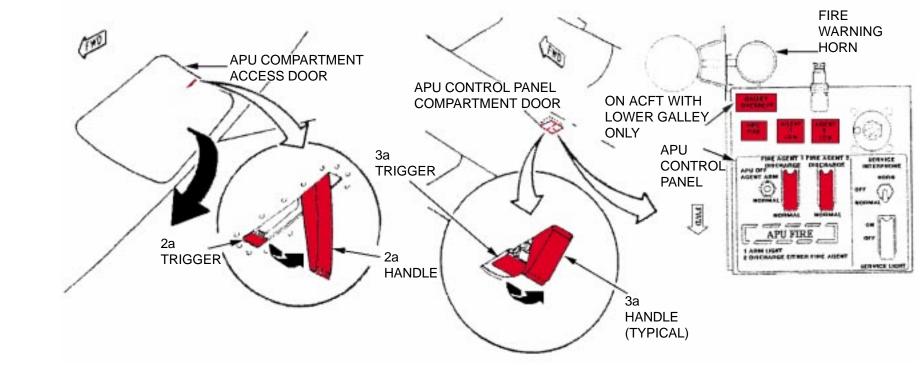
GENERAL ELECTRIC ENGINE



AIRCRAFT ACCESS DOORS

- 1. CENTER ACCESSORY COMPARTMENT DOOR
- a. Pull down external handle and rotate in direction indicated by placarding on door.
- b. Stow handle and slide door to right side of fuselage.
- 2. APU ACCESS DOOR
- a. Press trigger to release handle.
- b. Support door after unlatching.
- c. Door opens down.
- 3. APU GROUND CONTROL PANEL COMPARTMENT DOOR
- a. Press three (3) triggers on door to release three handles.
- b. Door opens down.





1/4 Inch Drive Tool

AIRCRAFT ENTRY

WARNING

When emergency mode is used to open any passenger door, door will automatically move to full open position.

- OPERATION OF ALL 8 DOORS NORMAL MODE-ELECTRICAL
- a. Pull door control handle out of recess to disarm escape slide.
- b. Move door control switch to open and hold.
- c. When door is fully open, release switch.

IF DOOR DOES NOT OPEN:

- EMERGENCY MODE-PNUEMATIC (ALL 8 DOORS)
- a. Pull door control handle out of fuselage.
- b. Rotate emergency override lever from safe position to emergency position and hold.
- Rotate door control handle to emergency position (see dotted PULL handle).

IF DOOR STILL DOES NOT OPEN:

- d. Push door inward as far as possible and hold
- e. Use any available means to pry door upward.

WARNING

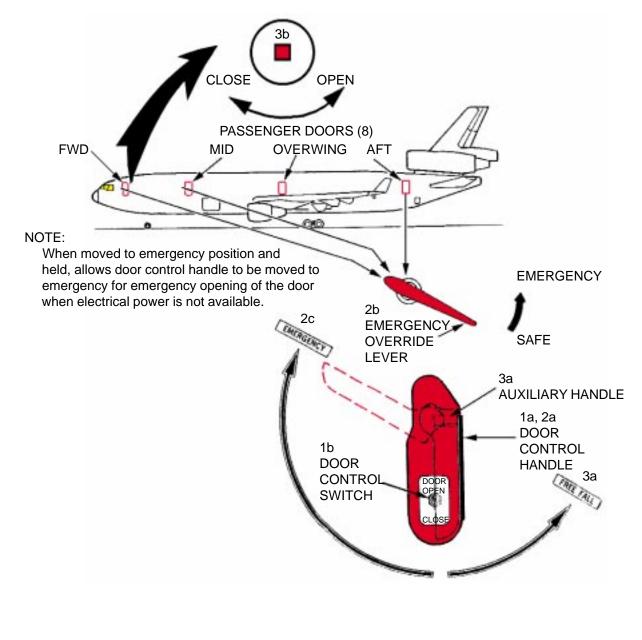
Door with slide attached is very heavy. Required lifting force may exceed 400 pounds.

- AUXILIARY MODE USING 1/4-INCH DRIVE FITTING (Applicable for forward left fuselage door only.)
- Pull handle out, rotate to free fall position and hold.
- Insert 1/4-inch drive into socket and rotate as indicated until door is open.

CAUTION

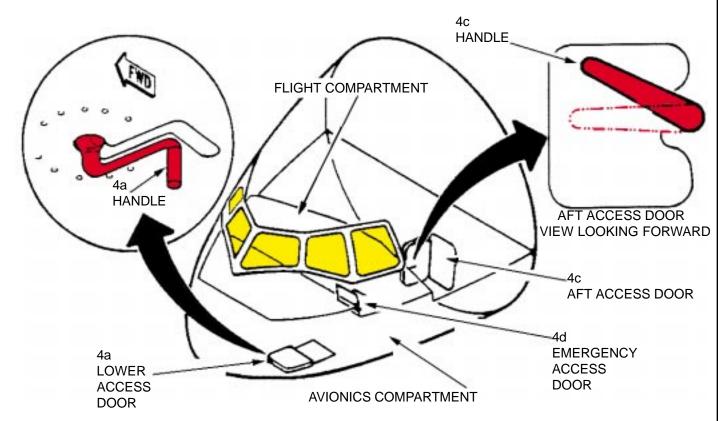
Torque applied in excess of 100 inch pounds or 500 RMPs may result in damage.

c. Release door control handle to neutral position.



AIRCRAFT ENTRY-Continued

- 4. FLIGHT COMPARTMENT ENTRY THROUGH THE AVIONICS COMPARTMENT
- a. To open the avionics compartment lower access door, pull down and turn outer handle counterclockwise.
- b. Stow handle and slide door forward.
- c. To open avionics compartment aft access door, turn handle up (clockwise) and push door.
- d. To open avionics compartment emergency access door, push to open into flight compartment.



AIRCRAFT ENTRY-Continued

- 5. EXTERNAL CARGO DOOR OPERATION WITH POWER AVAILABLE
- a. Press trigger to release handle.
- b. Pull handle out and up.
- c. Place door power switch on.
- d. Place door switch to open.

WARNING

To prevent door from springing open, manually crank door actuator to the fully closed position prior to manually unlatching.

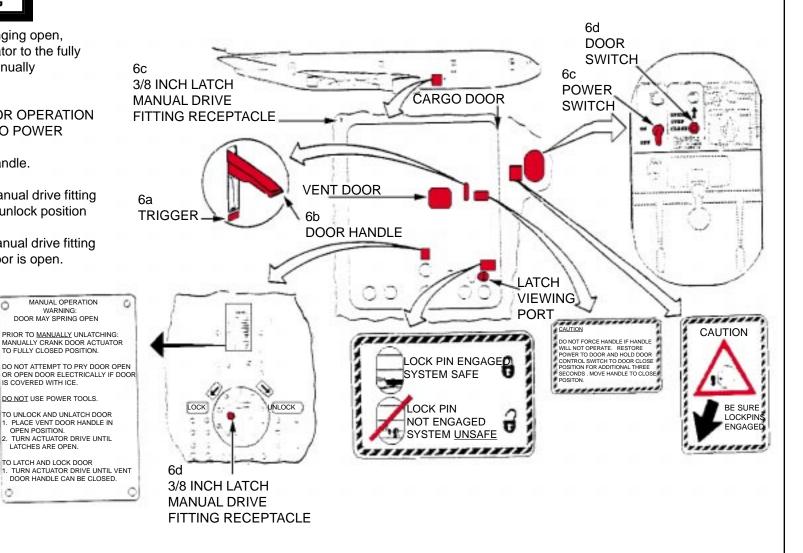
- 6. EXTERNAL CARGO DOOR OPERATION WITH MANUAL MODE-NO POWER
- a. Press trigger to release handle.
- b. Pull handle out and up.
- c. Insert drive tool in latch manual drive fitting and turn drive tool toward unlock position until latches are open.
- d. Insert drive tool in door manual drive fitting and turn clockwise until door is open.

WARNING:

IS COVERED WITH ICE.

OPEN POSITION.

LATCHES ARE OPEN. TO LATCH AND LOCK DOOR

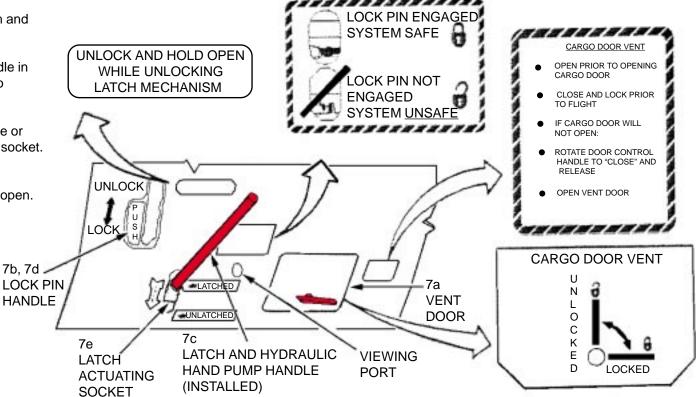


7. UPPER CARGO DOOR INTERNAL OPERATION CONVERTIBLE FREIGHTER AIRCRAFT ONLY

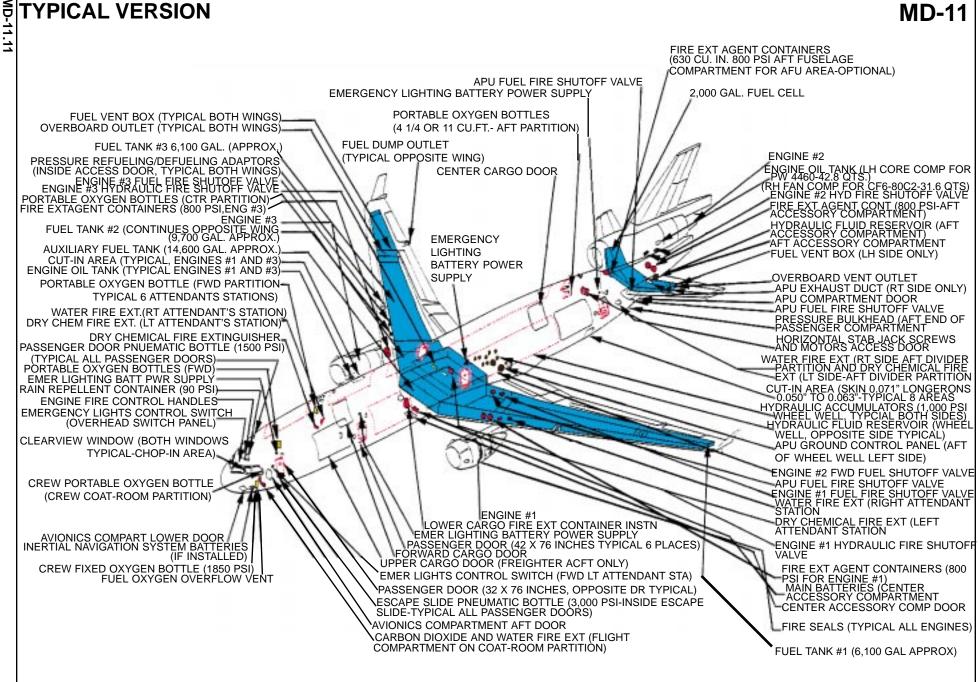
NOTE:

If installed, pip pin must be removed from locktube to allow unlocking of lockpin handle.

- a. To open manually, rotate vent door handle to unlock position.
- b. Pull lockpin handle up to unlock position and hold.
- Insert pipe or hydraulic hand pump handle in latch actuating socket and push down to unlatched position.
- Release lockpin handle and remove pipe or hand pump handle from latch actuating socket.
- e. Place cable loop or hook through latch actuating socket to manually hoist door open.

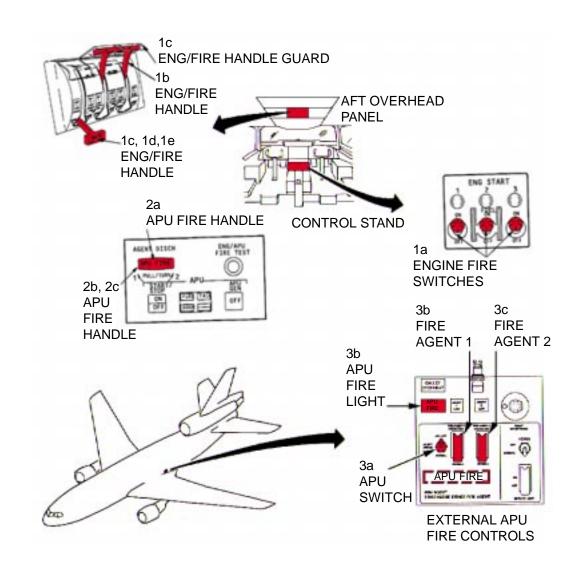


TYPICAL VERSION **MD-11**



ENGINE/APU SHUTDOWN AND AIRCREW EXTRACTION

- 1. ENGINE SHUTDOWN
- a. Place the engine fire switches, located on the control stand, to OFF (DOWN) position.
- b. If light(s) in fuel lever(s), located on the control stand, or "ENG/FIRE" handle(s), located on the aft overhead panel, are illuminated: lift "ENG/FIRE" handle guard(s).
- c. Pull "ENG/FIRE" handle(s) down and forward.
- d. While holding forward pressure on handle, turn handle clockwise and hold.
- e. After ten second delay, turn handle counterclockwise.
- 2. INTERNAL APU FIRE SHUTDOWN
- a. Pull APU fire handle, located on aft overhead panel, outward.
- b. If 'APU FIRE" light is illuminated: rotate "APU FIRE" handle clockwise.
- c. After ten second delay, rotate "APU FIRE" handle counterclockwise.
- 3. EXTERNAL APU FIRE SHUTDOWN
- a. Turn APU switch to OFF (UP) position.
- b. If APU fire light illuminates: place fire agent 1 switch to "DISCHARGE" (UP) position.
- c. After ten second delay, place fire agent 2 switch to "DISCHARGE" (UP) position.
- 4. AIRCREW EXTRACTION
- a. Rotate quick disconnect knob on lap belt and remove shoulder harness.
- Pull seat manual release handle to adjust seat to a recline position in removing crewmembers.
- c. Attendant seats are equipped with shoulder harness and lap belt.
- d. Passenger seats are equipped with lap belts only.

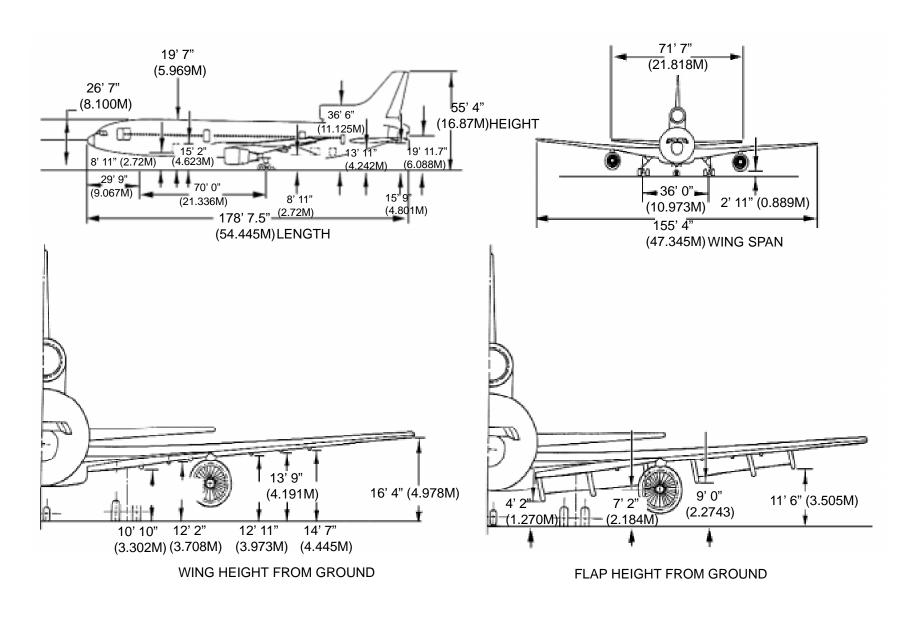


T.O. 00-105E-9

AIRCRAFT DIMENSIONS AND GENERAL GROUND CLEARANCE

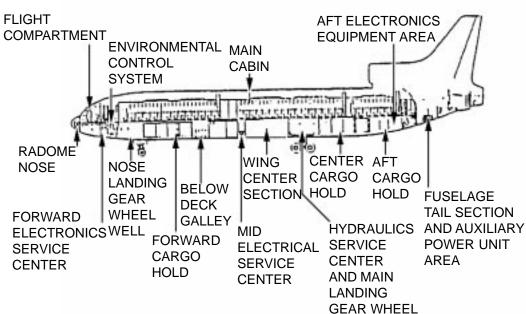
NOTE:

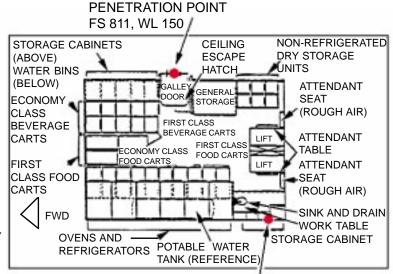
All heights are approximate.



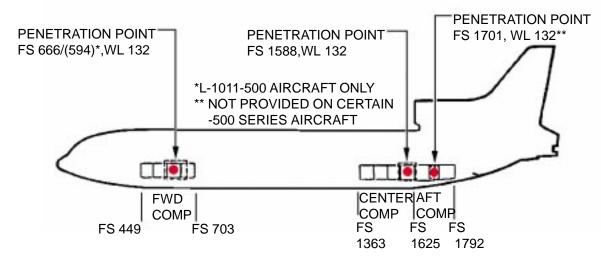
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COMPARTMENT LOCATIONS INBOARD PROFILE

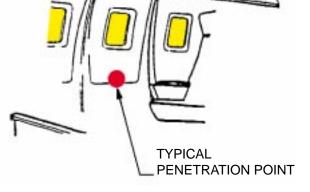




PENETRATION POINT UNDERFLOOR GALLEY FS 912, WL 156 PENETRATION POINT



WELLS

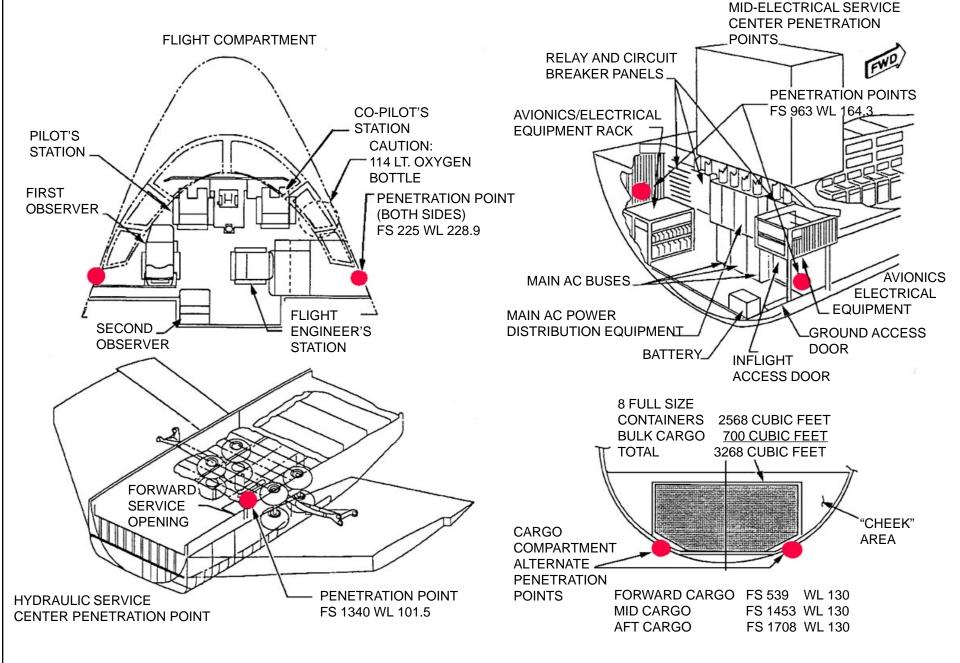


PASSENGER AREA PENTRATION POINTS (VIEW FROM INSIDE LOOKING OUTBOARD)

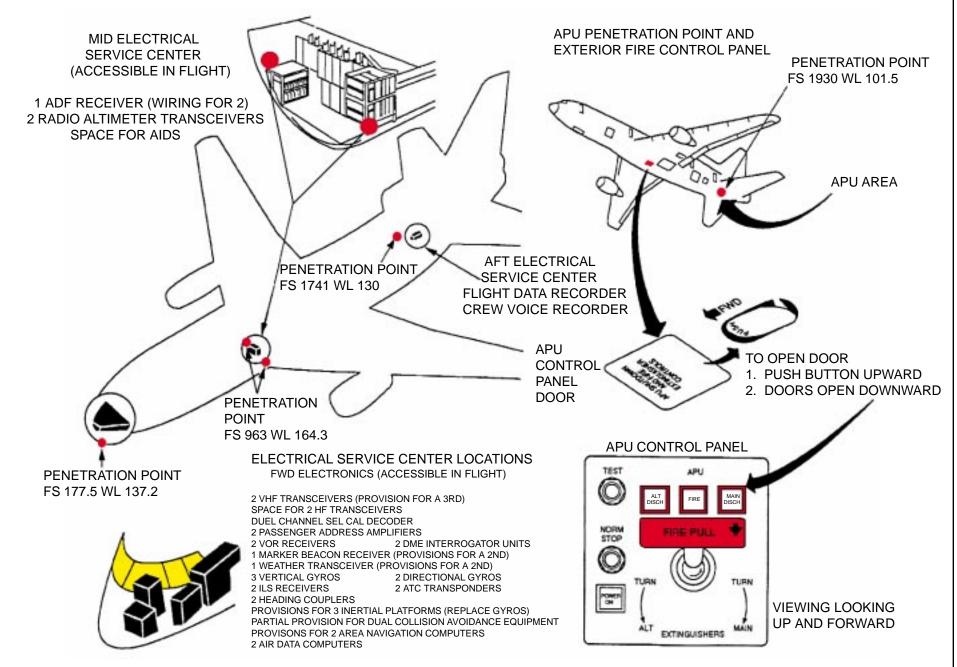
CARGO COMPARTMENT GENERAL ARRANGEMENT, WITH PENETRATION POINTS SHOWN

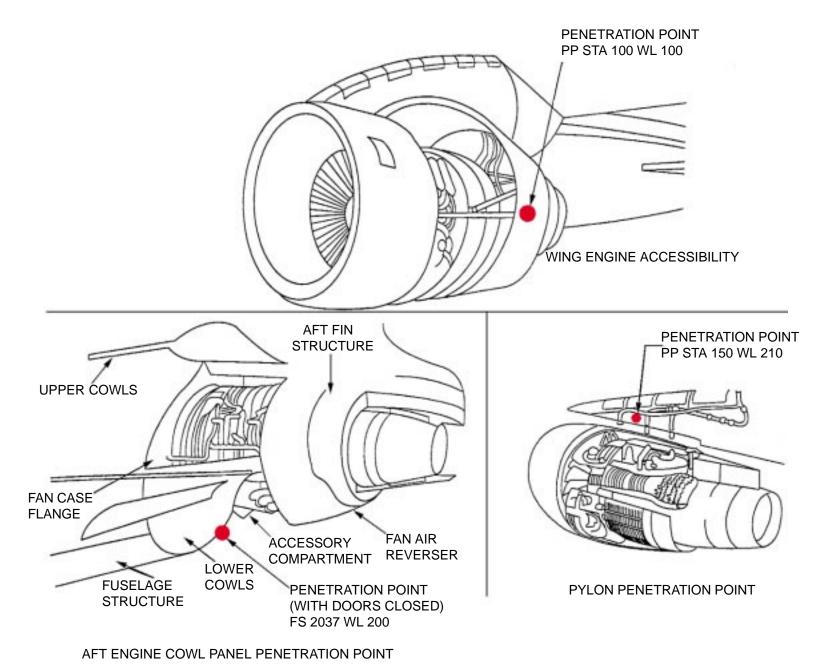
AIRCRAFT SKIN PENETRATION POINTS-Continued

_-1011-1.3



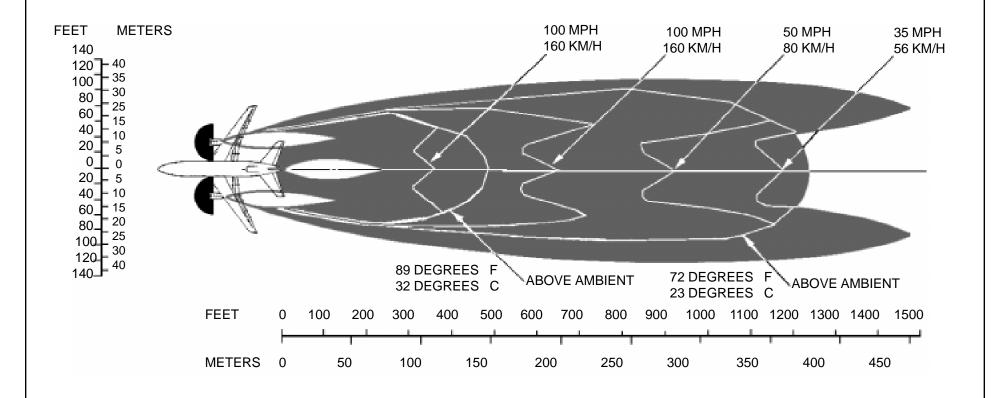
AIRCRAFT SKIN PENETRATION POINTS-Continued





T.O. 00-105E-9

- IDLE EXHAUST DANGER AREA
- MAXIMUM POWER EXHAUST DANGER AREA
- ENGINE INTAKE DANGER AREA



L-1011-1

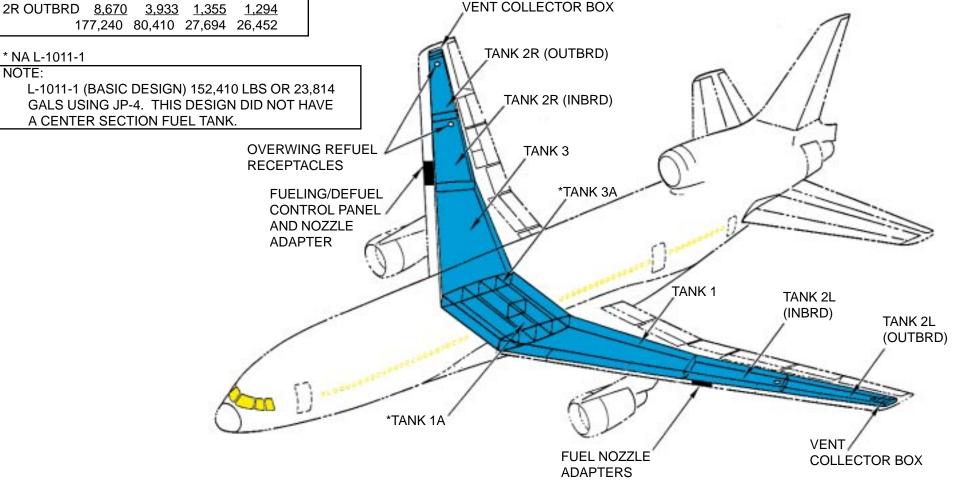
FUEL CELL			JP-4	JP-8	
	LBS	KGS	GALS	GALS	
2L OUTBD	8,670	3,933	1,355	1,294	
2L INBRD	16,980	7,702	2,653	2,534	
1	53,970	24,480	8,433	8,055	
*1A	9,000	4,090	1,406	1,343	
3	53,970	24,480	8,433	8,055	
*3A	9,000	4,090	1,406	1,343	
2R INBRD	16,980	7,702	2,653	2,534	
2R OUTBRD	<u>8,670</u>	<u>3,933</u>	<u>1,355</u>	<u>1,294</u>	
177 040 00 440 07 004 00 450					

NOTES:

L-1011-100/-200 are extended range (ER) versions with a center section fuel tank and RB-211-22B engines. The -200 series are used in "HOT & HIGH" areas where improved takeoff and performance is needed.

L-1011-250 ER (not illustrated) has RB211-524B turbofan engines.

Outward configurations are identical for all mentioned series aircraft.



CAUTION

Parking brake pressure approximately 1500 PSi. Brake fluid will spray from lines as they are cut.

CAUTION

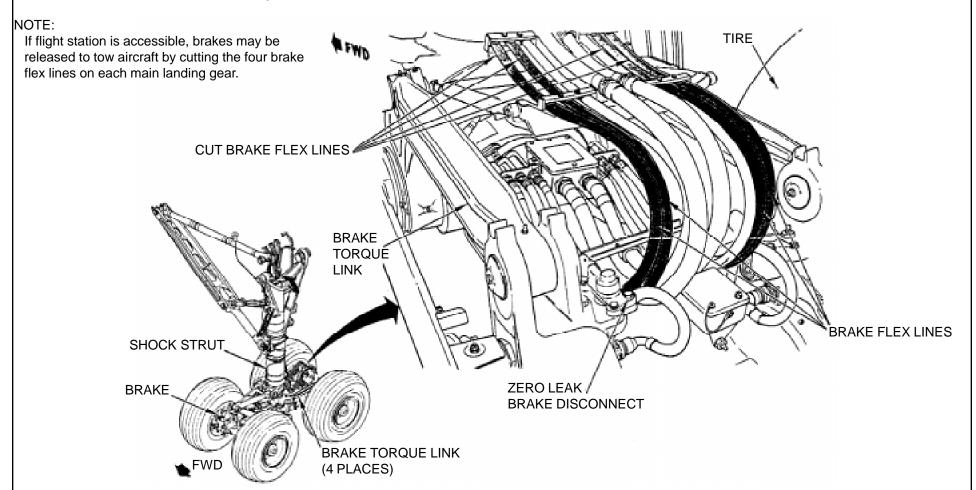
When brake flex lines are cut, aircraft may roll.

WARNING

Do not cut any other lines besides the brake flex lines.

NOTE:

Brake flex lines are the two lines closest to the tires. Brake flex lines have internal woven metalic armor.



SPECIAL TOOLS/EQUIPMENT Power Rescue Saw 36 Foot Ladders

Fire Drill II

AIRCRAFT ENTRY-1/-100/-200 SERIES

1. EXTERNAL NORMAL/EMERGENCY ENTRY

- a. Pull emergency release handles, located forward on all doors, to open doors in and up automatically. Slide will not deploy.
- Push exit button, located on flight compartment hatch, to open flight compartment hatch. Hatch opening can be used for the emergency decent device.
- Pull galley door latch, located above galley door, down and push door in and up until uplatch engages.

2. INTERNAL NORMAL/MANUAL EXIT

- a. Place evacuation slide mode selector lever in the desired position (engage to deploy slide, detach to prevent slide deployment).
- b. Electrically operate the doors by using the open and close switches.

3. INTERNAL EMERGENCY EXIT

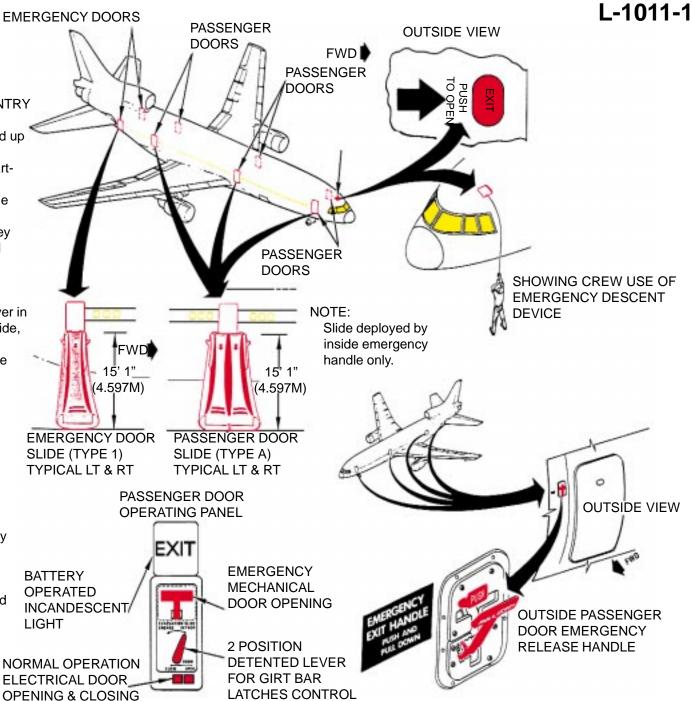
- a. Place evacuation slide mode selector lever in the desired position (engage to deploy slide, detach to prevent slide deployment).
- b. Remove transparent plastic cover over inside "T" handle.
- Pull inside "T" handle down all the way.
 Counterbalance will drive door completely open rapidly and deploy slide if selected.

4. CUT-IN

a. Cut-in areas located 20 inches above and below windows.

NOTE:

Fuselage rings located every 20 inches NORMAL OPERATION in these areas.



ENGINE/APU SHUTDOWN AND AIRCREW EXTRACTION

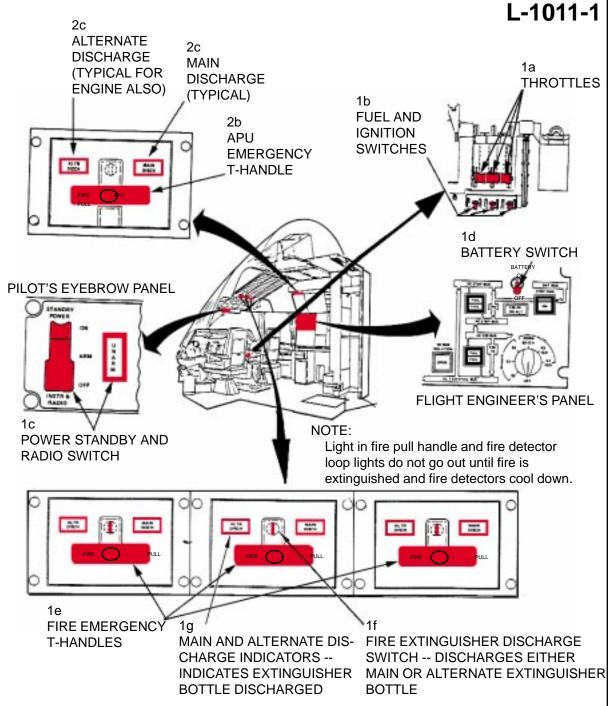
- 1. ENGINE SHUTDOWN
- Retard throttles, located on pilot's center console, to IDLE CUTOFF position.
- Place fuel and ignition switches, located on pilot's center console, to OFF position.
- Lift red cover of standby power instrument and radio switch, located on pilot's eyebrow panel, to OFF position.
- d. Unlock battery switch, located on flight engineer's panel, and move to OFF position by pulling out on battery switch and then moving switch down.
- e. In case of fire (see fire detector light) or engines fail to shutdown, pull emergency fire T-handles, located on pilot's overhead panel.
- f. Move spring loaded toggle switch, located under T-handle, to main discharge, to release extinguishing agent.
- g. If fire was not extinguished after step e, wait 30 seconds before moving same switch to alternate discharge.

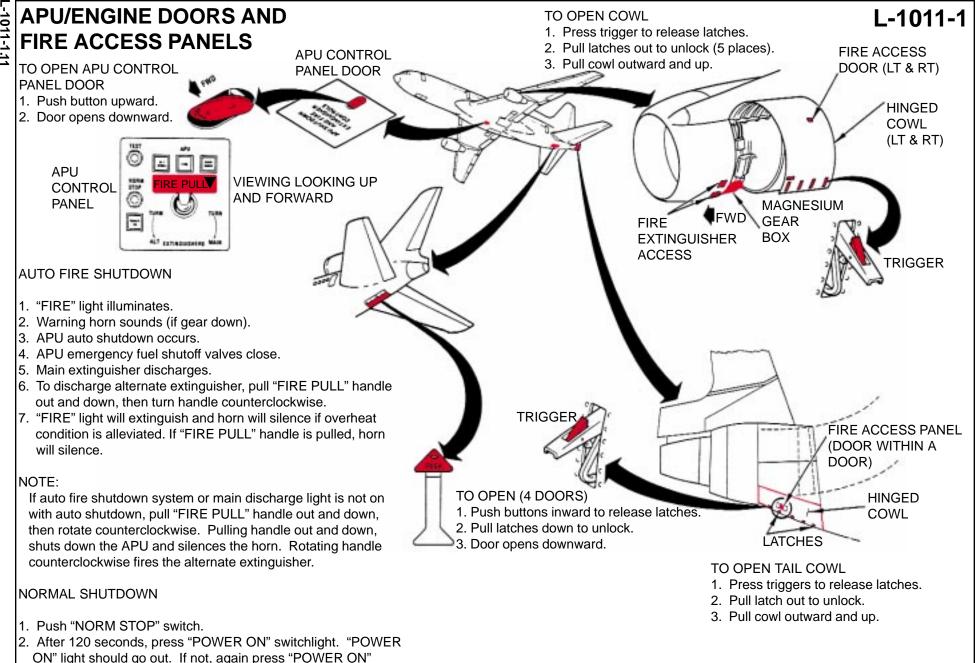
2. APU SHUTDOWN

- a. Place APU master power switch, located on flight engineer's panel to OFF position.
- b. In case of APU fire (see fire detector light) pull T-handle, located on flight engineer's panel.
- Extinguisher discharge switch is exposed and bottle may be fired by moving switch to right or left.

3. AIRCREW EXTRACTION

- a. Unlatch lap belt and remove shoulder harness from crewmember(s) and flight attendants.
- If seat tracks are not damaged during crash landing, use adjustable seat controls to retract seats to aft position.
- c. Passenger seats are equipped with lap belts only.





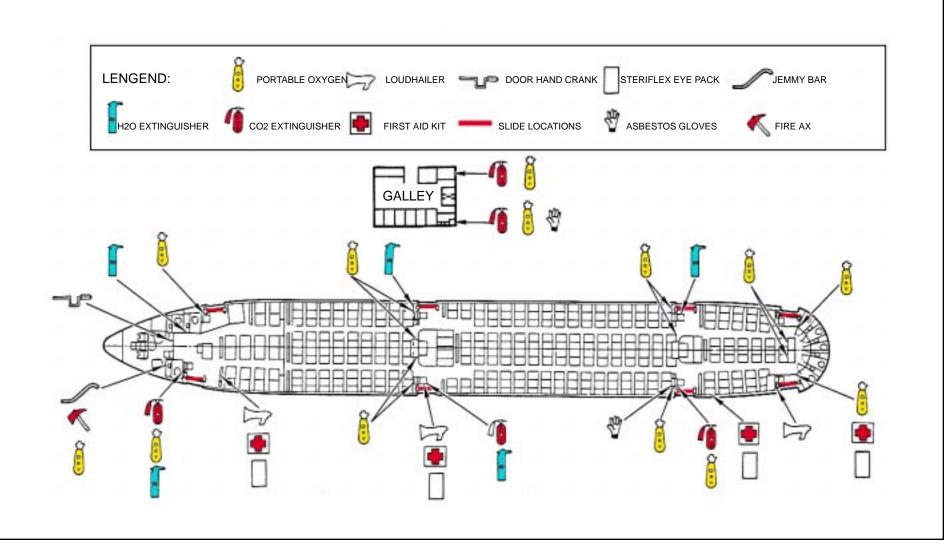
switchlight.

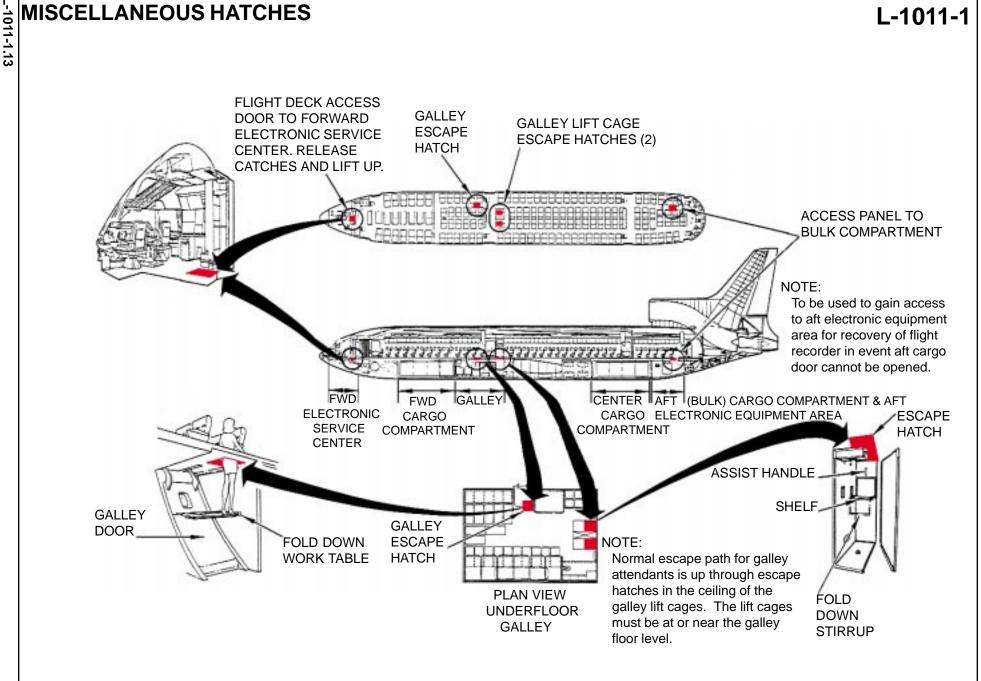
T.O. 00-105E-9

EMERGENCY EQUIPMENT AND SEATING LOCATIONS

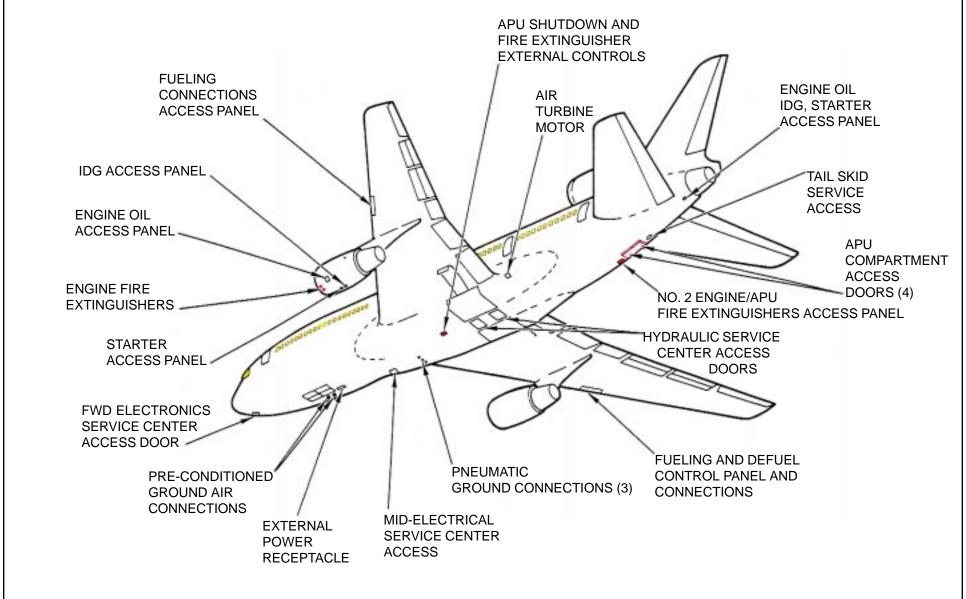
NOTE:

Flight crew is 3 plus attendants. First class is 24 with 6 abreast. Economy class is 222 with 9 abreast. All economy passenger capacity is a maximum of 400. Most common configuration has a maximum of 330 passengers.





_-1011-1.14



CARGO AND SERVICE CENTER DOORS

EXTERIOR

GALLEY

DOOR

LATCH

DOOR

GRIP

TO OPEN GALLEY DOOR

1. Pull latch down, push door in and up until uplatch engages.

TO CLOSE GALLEY DOOR

1. Pull door closed and press latch plush.

NOTE:

Door opens in from bottom and swings up.

GALLEY DOOR OPERATION

CABIN FLOOR

PRESSURE DOOR FAIRING DOOR.

Galley door opening and closing. The galley door is manually opened or closed from the inside or outside.

OUTSIDE- OPEN-Pull out on exterior latch above door and push in and up on door until uplatch engages. Counterbalance will assist door swinging into overhead.

CLOSE-Unlatch door and pull closed then press exterior latch flush.

INSIDE-OPEN-Move interior lever to open position, assist door up until up latch engages.

CLOSE-Unlatch door and push closed then move handle to the closed position. Confirm that the door ditch latches are properly engaged by checking alignment of the stripe in accordance with the decal at the aft ditch latch.

FORWARD AVIONICS SERVICE CENTER DOOR OPERATION

TO OPEN AVIONICS SERVICE CENTER DOOR

- 1. Push button in.
- 2. Pull handle out and turn counterclockwise 90⁰.

L-1011-1

3. Push door upward and aft.

LOCK MANUAL DRIVE AFT **CENTER** ACCESS FORWARD **LOCK MANUAL** DOOR DOOR DOOR DRIVE ACCESS LIFT MANUAL DRIVE ACCESS LOCK LIFT MANUAL **MANUAL DRIVE DRIVE ACCESS** ACCESS LATCH LATCH MANUAL DRIVE ACCESS MANUAL DRIVE ACCESS

FORWARD, CENTER AND AFT CARGO DOOR MANUAL OPERATION

 Remove lock actuator manual drive access (tri-wing screwdriver with no. 5 tip required) and rotate the manual knob clockwise approximately 12 turns.

NOTE:

Center cargo door has fairing access with one quick release latch prior to regular access.

- 2. Push in latch actuator manual drive access (spring loaded), insert a 1/2 inch square drive hand crank and rotate 130 turns clockwise.
- 3. Remove lift actuator manual drive access (tri-wing screwdriver with no. 5 tip required), insert a 1/2 inch square drive hand crank and rotate 200 turns counterclockwise or as necessary for entry.

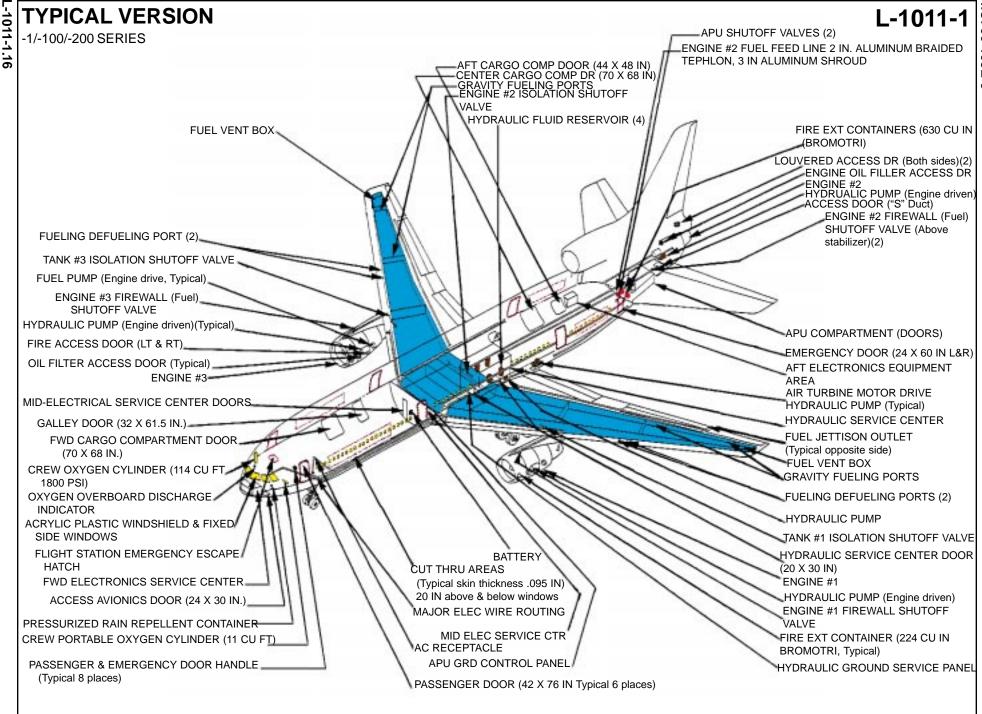
MID ELECTRICAL SERVICE CENTER ACCESS DOORS

TO OPEN FAIRING DOOR

- 1. Push button in.
- 2. Pull handle out and turn counterclockwise 900.
- 3. Door opens out.

TO OPEN PRESSURE DOOR

- 1. Turn handle counterclockwise 90°.
- 2. Push door up to engage retaining latch.
 This provides quick access to aircraft battery.



L-1011-500

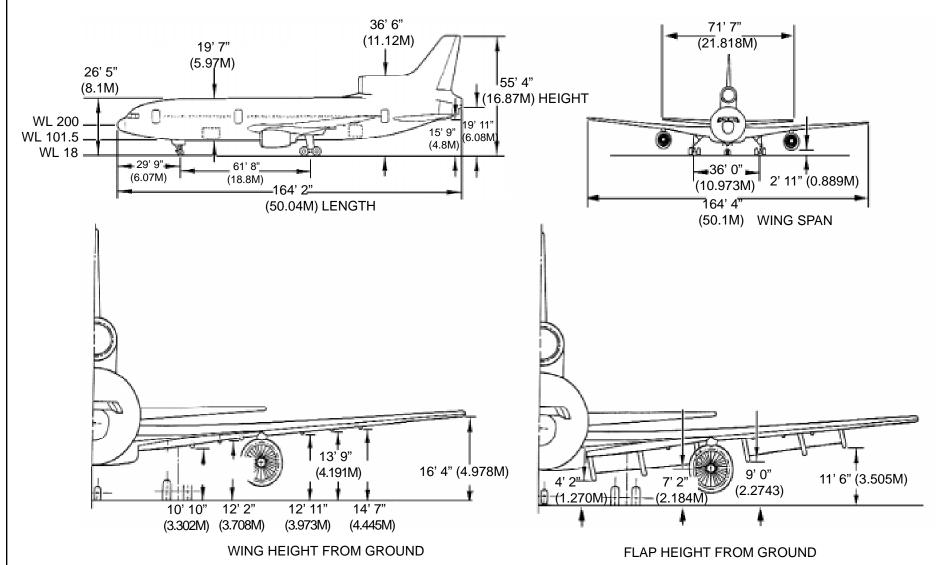
-500 SERIES

NOTE:

The L-1011-500's fuselage is shortened by 13 feet 6 inches and the wing span is 9 feet longer. All heights are approximate.

NOTE:

Aircraft skin penetration points, intake exhaust hazards and emergency brake release hazards are similiar to the L-1011 -1, -100, -200 models. Refer to pages L-1011-1.2 through L-1011-1.6 and L-1011-1.8 for these areas of concern.



L-1011-500. 2	AIRCRAFT HAZARDS FUEL TANK CAPACITIES AND QUANTITIES				
0.2	FUEL CELL			JP-4	JP-8
		LBS	KGS	GALS	GALS
	2L OUTBD	8,670	3,933	1,355	1,294
	2L INBRD	16,980	7,702	2,653	2,534
	1	53,970	24,480	8,433	8,055
	1A	27,000	12,247	4,219	4,030
	3	53,970	24,480	8,433	8,055
	3A	27,000	12,247	4,219	4,030
	2R INBRD	16,980	7,702	2,653	2,534
	2R OUTBRD	<u>8,670</u>	<u>3,933</u>	<u>1,355</u>	<u>1,294</u>
		213,240	96,724	33,320	31,826

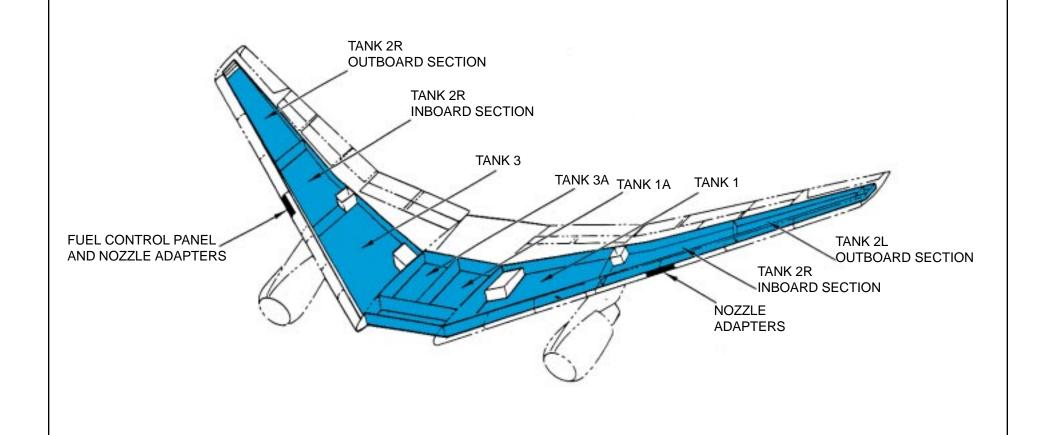
NOTES:

L-1011-500

selage length and re considered L-1011-250 (not illustrated incorporate the -500 modifications for the shortened fuselage length and RB211-524 turbofan engines. Both versions have center section fuel tanks and are considered extended range (ER) aircraft.

The United Kingdom has a tanker/freighter version.

L-1011F is an all cargo aircraft by PEMCO Aeroplex.



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw

36 Foot Ladders

Fire Drill II

AIRCRAFT ENTRY -500 SERIES

EXTERNAL NORMAL/EMERGENCY ENTRY

- a. Pull emergency release handles, located forward on all doors, to open doors in doors in and up automatically. Slide will not deploy.
- b. Push exit button, located on flight compartment hatch, to open flight compartment hatch. Hatch opening can be used for the emergency decent device.
- c. Pull galley door latch, located above galley door, down and push door in and up until uplatch engages.

2. INTERNAL NORMAL/MANUAL EXIT

- a. Place evacuation slide mode selector lever in the desired position (engage to deploy slide, detach to prevent slide deployment).
- b. Electrically operate the doors by using the open and close switches.

3. INTERNAL EMERGENCY EXIT

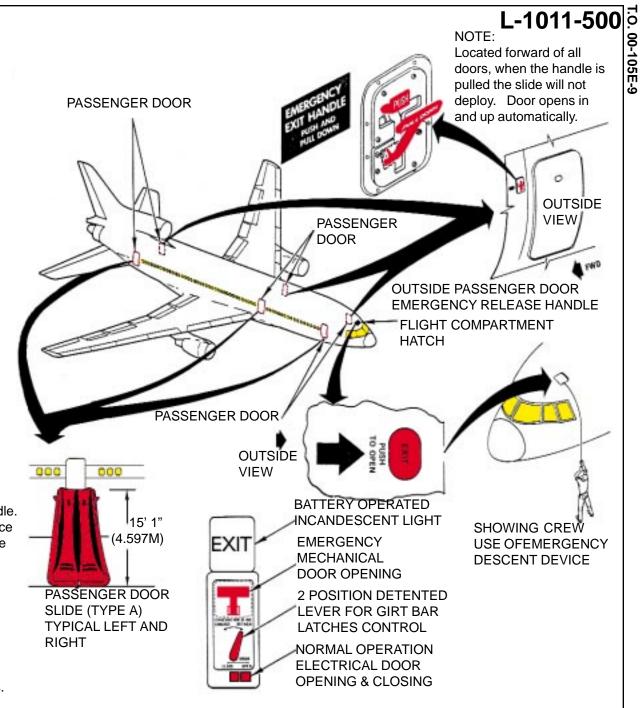
- a. Place evacuation slide mode selector lever in the desired position (engage to deploy slide, detach to prevent slide deployment).
- b. Remove transparent plastic cover over inside "T" handle.
- c. Pull inside "T" handle down all the way. Counterbalance will drive door completely open rapidly and deploy slide if selected.

4. CUT-IN

 Cut-in areas located 20 inches above and below windows.

NOTE:

Fuselage rings located every 20 inches in these areas.



ENGINE/APU SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

- a. Retard throttles, located on pilot's center console, to IDLE CUTOFF position.
- b. Place fuel and ignition switches, located on pilot's center console, to OFF position.
- c. Lift red cover of standby power instrument and radio switch, located on pilot's eyebrow panel, to OFF position.
- d. Unlock battery switch, located on flight engineer's panel, and move to OFF position by pulling out on battery switch and then moving switch down.
- e. In case of fire (see fire detector light) or engines fail to shutdown, pull emergency fire T-handles, located on pilot's overhead panel.
- f. Move spring loaded toggle switch, located under T-handle, to main discharge, to release extinguishing agent.
- g. If fire was not extinguished after step e, wait 30 seconds before moving same switch to alternate discharge.

2. APU SHUTDOWN

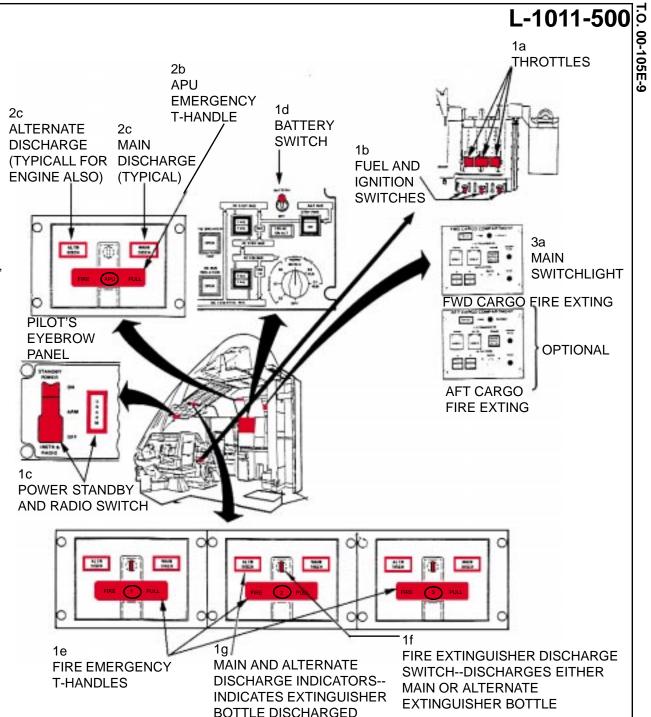
- a. Place APU master power switch, located on flight engineer's panel to OFF position.
- b. In case of APU fire (see fire detector light) pull T-handle, located on flight engineer's panel.
- c. Extinguisher discharge switch is exposed and bottle may be fired by moving switch to right or left.

3. CARGO FIRE EXTINGUISHMENT

a. Lift guard and push main switchlight, assure discharge light comes on. Use alternate extinguisher if main does not extinguish fire. There is only one main and one alternate extinguisher bottle, either can be discharged into either cargo compartment (if applicable). Close applicable door for highest effectivity.

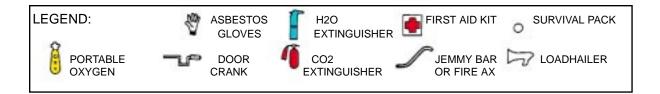
4. AIRCREW EXTRACTION

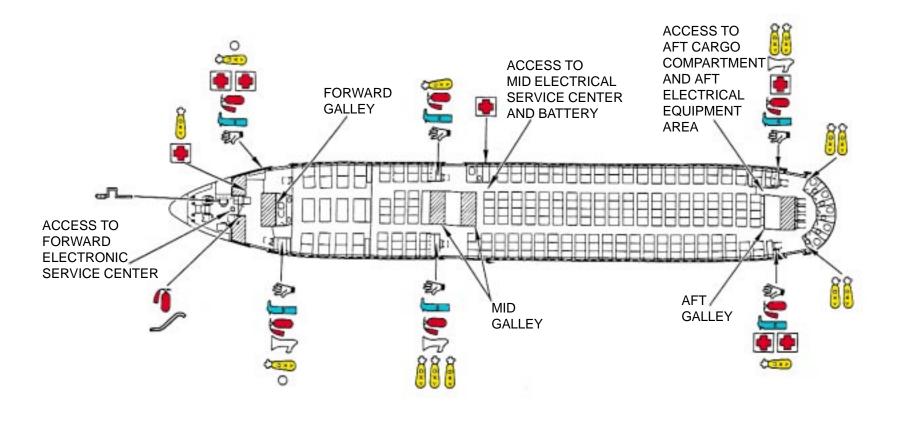
- a. Unlatch lap belt and remove shoulder harness from crewmember(s) and flight attendants.
- b. If seat tracks are not damaged during crash landing, use adjustable seat controls to retract seats to aft position.
- c. Passenger seats are equipped with lap belts only.



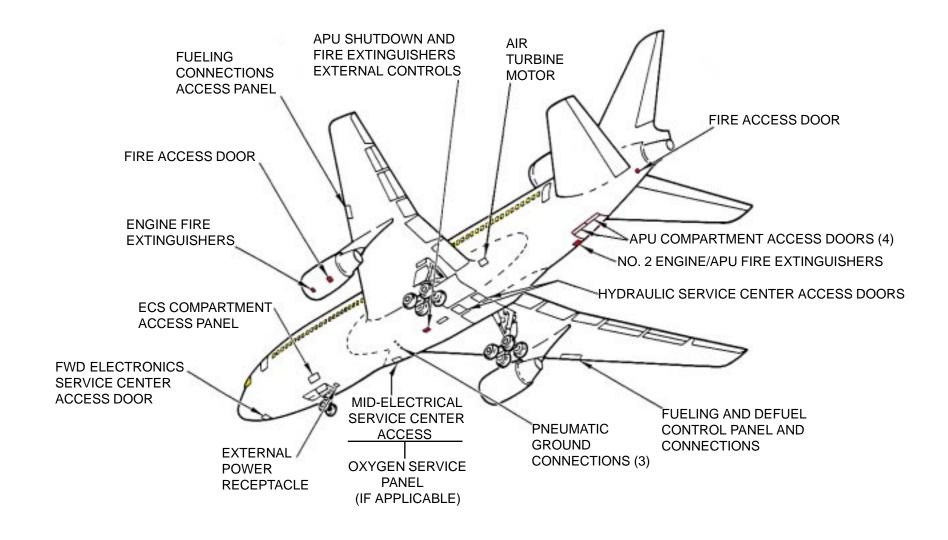
NOTE:

Flight crew is 3 plus attendants. First class is 24 with 6 abreast. Economy class is 222 with 9 abreast. All economy passenger capacity is a maximum of 400. Most common configuration has a maximum of 330 passengers.



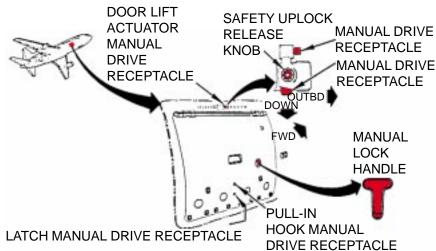


L-1011-500.6



CARGO AND SERVICE CENTER DOORS

L-1011-500 ☐



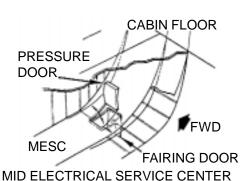
1. Pull manual handle to unlock door.

NOTE:

_-1011-500.7

To perform the remaining steps, a 1/2 inch square drive is needed.

- 2. Rotate the latch manual drive by cranking approximately 90 turns counterclockwise.
- 3. Rotate the hook manual drive approximately 90 turns counterclockwise.
- 4. Rotate the door lift manual drive counterclockwise until door is open (approximately 100 turns) enough to allow entry into the cargo compartment.
- 5. Inside the cargo compartment, rotate the door lift manual drive, located on the bottom of the lift actuator clockwise until the door is fully up or as necessary for entry.



ACCESS DOORS

TO OPEN FAIRING DOOR

- 1. Push button in.
- 2. Pull handle out and turn counterclockwise 90 ⁰.
- 3. Door opens out.

TO OPEN PRESSURE DOOR

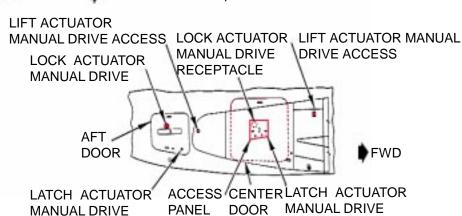
- 1. Turn handle counterclockwise 90°.
- 2. Push door up to engage retaining latch provides quick access to aircraft battery.

FORWARD AVIONICS SERVICE CENTER DOOR OPERATION



FWD I

- 1. Push button in.
- 2. Pull handle out and turn counterclockwise 900.
- 3. Push door upward and aft.



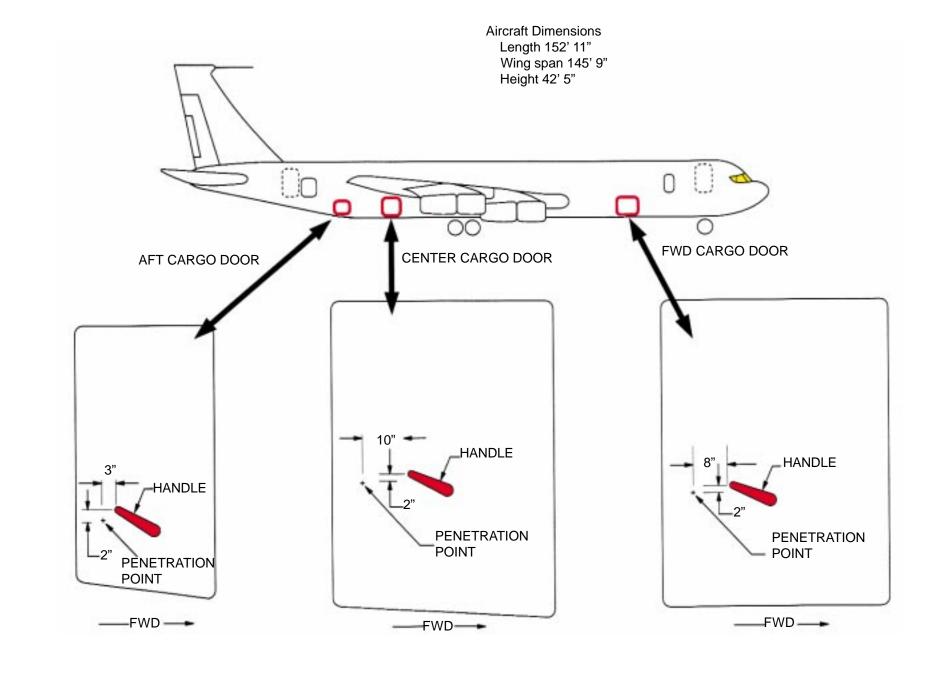
CENTER AND AFT CARGO DOOR MANUAL OPERATION TO OPEN CENTER CARGO DOOR:

- 1. Open access panel (4 quick release latches).
- 2. Remove lock actuator manual drive access (tri-wing screwdriver with #5 tip required) and rotate the manual knob clockwise approximately 12 turns.
- 3. Under same access as in step 1 insert a 1/2 inch square drive hand crank in the latch manual drive and rotate 130 turns clockwise.
- 4. Open lift actuator manual drive access (1 quick release latch), insert a 1/2 inch square drive hand crank and rotate 200 turns counterclock wise or as necessary for entry.

TO OPEN AFT CARGO DOOR

- 1. Remove lock actuator manual drive access (tri-wing screwdriver with #5 tip required) and rotate the manual knob clockwise approximately 12 turns.
- 2. Push in latch actuator manual drive access (spring loaded), insert a 1/2 inch square drive hand crank and rotate 130 turns clockwise.
- 3. Remove lift actuator manual drive access (tri-wing screwdriver with #5 tip required), insert a 1/2 inch square drive hand crank and rotate 200 turns counterclockwise or as necessary for entry.

AIRCRAFT SKIN PENETRATION POINTS

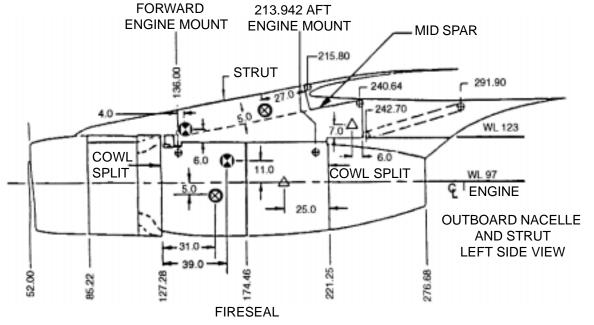


AIRCRAFT SKIN PENETRATION POINTS-Continued

707-120B-320C & 720B TURBOFAN ENGINES PENETRATION POINTS

RIGHT SIDE OF ENGINE

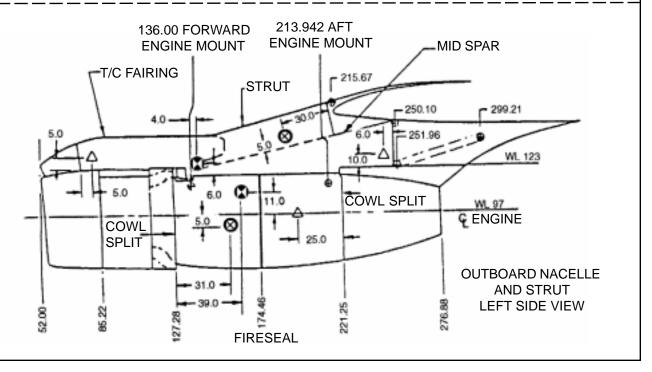
COMMON POINT (LH & RH SIDE)



707-120B-320C & 720B TURBOFAN ENGINES PENETRATION POINTS

RIGHT SIDE OF ENGINE

COMMON POINT (LH & RH SIDE)



SPECIAL TOOLS/E SPECIAL TOOLS/EQUIPMENT NOTE: Refer to the C-135 for more 24 Foot Ladder extensive information. Both PORTABLE OXYGEN **BOTTLES OR NEAR** 35 Foot Ladder airframes are identical except FLOOR LEVEL ON Fire Drill II cargo and tanker capabilities. **PARTITIONS** AIRCRAFT ENTRY-100/-200 SERIES 434 GALS (1643 LITERS) **HYDRAULIC** 1. NORMAL/EMERGENCY ENTRY **ACCUMULATORS** 2333 GALS (RIGHT WHEEL a. Overwing escape hatches both sides-(8831 LITERS) WELL AREA) Push red panel, located top center of hatches, in and push hatches inward. FIRE EXTINGUISHER 2283 GALS PASSENGER OXYGEN PORTS ON ENGINE (8642 SYSTEM BOTTLES IN AFT RIGHT COWLING LITERS) CARGO COMPARTMENT b. Pull handle, located left side forward and (TYPICAL EACH ENGINE aft entry doors, outward and rotate clockwise. UTILITY & AUXILIARY RESERVOIR IN AFT CARGO COMPARTMENT **CREW OXYGEN SYSTEM** c. Pull handle, located forward and aft galley 2283 GALS 2333 GALS **BOTTLES IN FWD LOWERED** doors right side, outward and rotate counter-(8642 LITERS) (8831LITERS) 434 GALS CEILING OR FWD CARGO AREA clockwise. (1643 LITERS) d. Press red handle, located on escape hatch top 7306 GALS right forward crew compartment, and pull out. (27,656 LITERS) A **BATTERIES** 2. CUT-IN ENGINE OIL TANK-EACH **ENGINE-RIGHT SIDE** PORTABLE OXYGEN BOTTLE ON a. Cut along window lines as last resort. FORWARD SIDE OF BULKHEAD AIRCRAFT CROSS SECTION GALLEY DOOR NOTE: 1a Some series are equipped with class one EXTERNAL HANDLE **PANEL** escape hatches. **CUT-IN AREAS CAUTION** For passenger and service doors, emergency 2 inch band of contrasting color around all slide will automatically deploy when doors are doors, windows and hatches operable from opened externally. ON CARGO **EMERGENCY EXITS** outside the aircraft. ACFT ONLY **FWD ENTRY** DOOR* AFT ENTRY DOOR **GALLEY DOOR GALLEY DOOR** CUT-IN AREA EACH SIDE OF ACFT (RT SIDE ONLY) (RIGHT SIDE ONLY) **ENTRY DOOR**

EXTERNAL HANDLE

(NOT MARKED ON ALL ACFT)

O. 00-105E-9

1. ENGINE SHUTDOWN

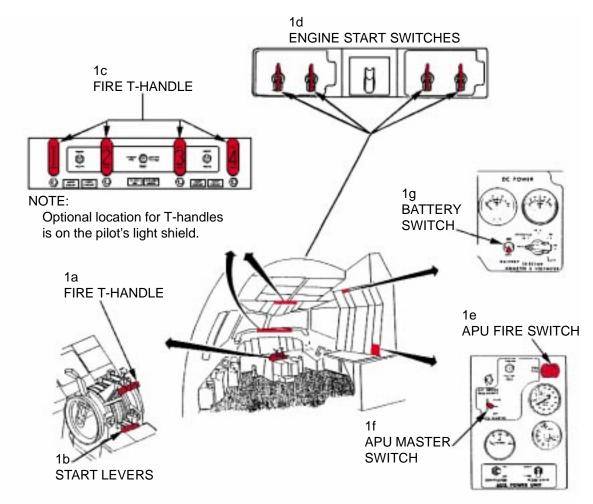
- APPLICABILITY: 707-100/-200 -300/-400 720 & 720B
- a. Retard thrust levers, located on pilot's center console, to RETARD position.
- b. Place engine start levers, located on pilot's center console, to CUT OFF position
- c. Pull emergency fire T-handles, located top center above instrument panel.
- d. Place engine start switches, located on pilot's overhead panel, to OFF position.
- e. In case of APU fire, pull APU fire switch, located on the upper left flight engineer's panel, out to apply agent to APU.
- f. If no APU fire, place APU master switch, located on the upper left flight engineer's panel, to OFF position.
- g. Place battery switch, located on lower right flight engineer's panel, down to OFF position.
- 2. AIRCREW EXTRACTION
- a. Unlatch lap belts and remove shoulder harness from crewmembers.
- b. Depress seat control handles, located on flight engineer's seat, and rotate from left to right.

NOTE:

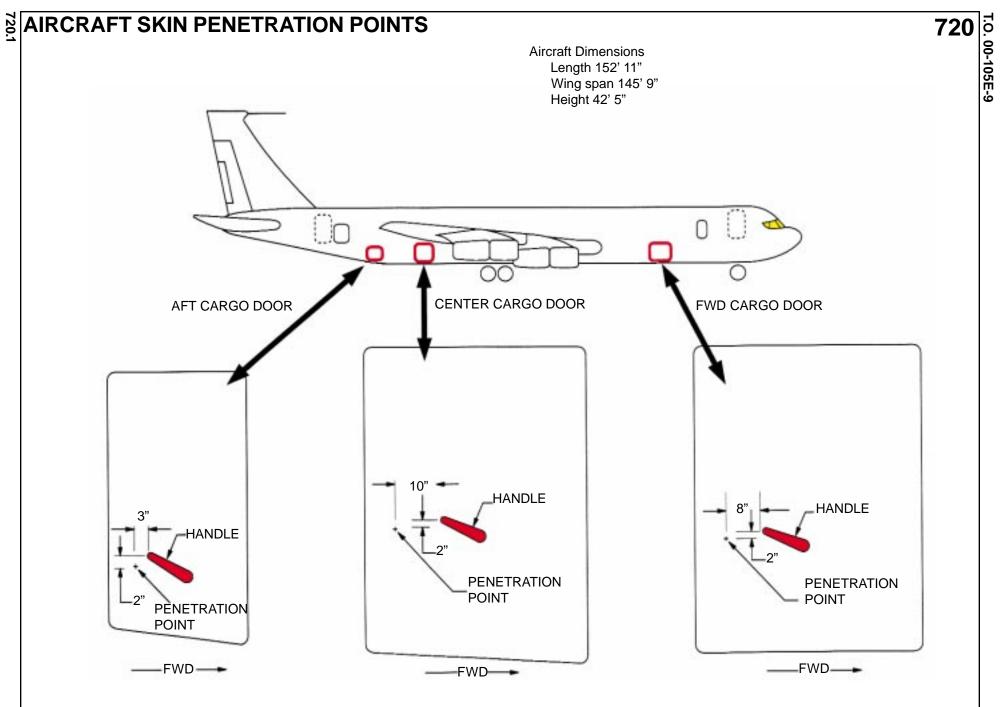
If seat tracks are not damaged during crash landing, use adjustable seat controls to retract seats to aft position.

NOTE:

Passenger seats are equipped with lap belts only.



SPECIAL TOOLS/EQUIPMENT NOTE: Power Rescue Saw Refer to the C-135 for more PORTABLE OXYGEN 24 Foot Ladder extensive information. Both **BOTTLES 8 PLACES** ON HATRACKS OR 35 Foot Ladder airframes are identical except NEAR FLOOR LEVEL cargo and tanker capabilities. Fire Drill II ON PARTITIONS AIRCRAFT ENTRY-300/-400 SERIES **434 GALS** (1643 LITERS) **HYDRAULIC** 1. NORMAL/EMERGENCY ENTRY **ACCUMULATORS** (RIGHT WHEEL 2285 GALS a. Overwing escape hatches both sides-WELL AREA) (8650 LITERS) Push red panel, located top center of hatches, in and push hatches inward. 4036 GALS FIRE EXTINGUISHER PASSENGER OXYGEN PORTS ON ENGINE (15,278 SYSTEM BOTTLES IN AFT RIGHT COWLING CARGO COMPARTMENT LITERS) b. Pull handle, located left side forward and (TYPICAL EACH ENGINE) aft entry doors, outward and rotate clockwise. UTILITY & AUXILIARY RESERVOIR APU FUEI (LEFT FILLET AREA) LINE c. Pull handle, located forward and aft galley **CREW OXYGEN SYSTEM** 4036 GALS 2285 GALS BOTTLES IN FWD LOWERED doors right side, outward and rotate counter-(15,278 LITERS) (8650 LITERS) 434 GALS CEILING OR FWD CARGO AREA. clockwise. (1643 LITERS) APU FWD CARGO d. Press red handle, located on escape hatch top COMPARTMENT ON 10,190 GALS **25000 SERIES** right forward crew compartment, and pull out. (38,573 LITERS) ENGINE OIL TANK-EACH ENGINE-2. CUT-IN BATTERIES RIGHT SIDE PORTABLE OXYGEN BOTTLE ON a. Cut along window lines as last resort. FORWARD SIDE OF BULKHEAD 1c AIRCRAFT CROSS SECTION **GALLEY DOOR** NOTE: 1a **EXTERNAL HANDLE** Some series are equipped with class one PANEL escape hatches. **CUT-IN AREAS CAUTION** For passenger and service doors, emergency 2 inch band of contrasting color around all slide will automatically deploy when doors are doors, windows and hatches operable from opened externally. ON CARGO **EMERGENCY EXITS** outside the aircraft. ACFT ONLY **FWD ENTRY** DOOR ' AFT FNTRY DOOR **GALLEY DOOR** GALLEY DOOR **CUT-IN AREA EACH SIDE OF ACFT** (RT SIDE ONLY) **ENTRY DOOR** (RIGHT SIDE ONLY) (NOT MARKED ON ALL ACFT) **EXTERNAL HANDLE**

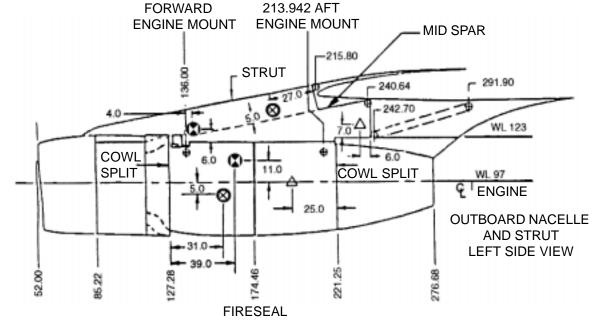


ENGINES PENETRATION POINTS

⊗ LEFT SIDE OF ENGINE

RIGHT SIDE OF ENGINE

COMMON POINT (LH & RH SIDE)

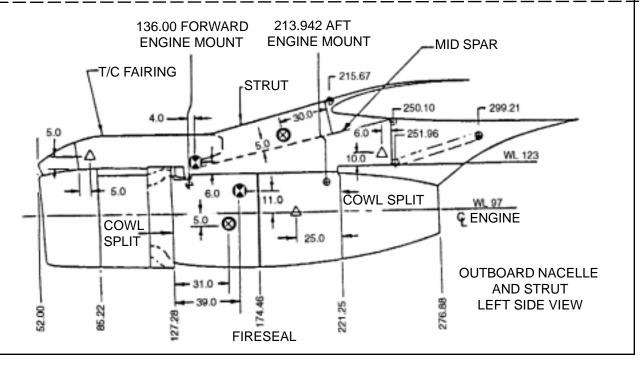


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707-120B-320C & 720B TURBOFAN ENGINES PENETRATION POINTS

RIGHT SIDE OF ENGINE

COMMON POINT (LH & RH SIDE)



SPECIAL TOOLS/EQUIPMENT NOTE: Power Rescue Saw Refer to the C-135 for more PORTABLE OXYGEN 24 Foot Ladder extensive information. Both **BOTTLES OR NEAR** 35 Foot Ladder airframes are identical except FLOOR LEVEL ON Fire Drill II cargo and tanker capabilities. **PARTITIONS 434 GALS** AIRCRAFT ENTRY (1643 LITERS) **HYDRAULIC** 1. NORMAL/EMERGENCY ENTRY **ACCUMULATORS** 2333 GALS (RIGHT WHEEL a. Overwing escape hatches both sides-WELL AREA) (8831 LITERS) Push red panel, located top center of hatches, in and push hatches inward. 2283 GALS FIRE EXTINGUISHER PASSENGER OXYGEN PORTS ON ENGINE (8642 SYSTEM BOTTLES IN AFT RIGHT COWLING CARGO COMPARTMENT LITERS) b. Pull handle, located left side forward and (TYPICAL EACH ENGINE aft entry doors, outward and rotate clockwise. UTILITY & AUXILIARY RESERVOIR IN AFT CARGO COMPARTMENT **CREW OXYGEN SYSTEM** c. Pull handle, located forward and aft galley 2283 GALS 2333 GALS BOTTLES IN FWD LOWERED doors right side, outward and rotate counter-(8642 LITERS) (8831LITERS) 434 GALS CEILING OR FWD CARGO AREA clockwise. (1643 LITERS) d. Press red handle, located on escape hatch top 7306 GALS right forward crew compartment, and pull out. (27,656 LITERS) 🐴 ENGINE OIL TANK-EACH 2. CUT-IN **ENGINE-RIGHT SIDE** PORTABLE OXYGEN BOTTLE ON a. Cut along window lines as last resort. FORWARD SIDE OF BULKHEAD 1c AIRCRAFT CROSS SECTION NOTE: **GALLEY DOOR** 1a **EXTERNAL HANDLE** Some series are equipped with class one **PANEL** escape hatches. CUT-IN AREAS **CAUTION** For passenger and service doors, emergency 2 inch band of contrasting color around all slide will automatically deploy when doors are doors, windows and hatches operable from ON CARGO opened externally. EMERGENCY EXITS outside the aircraft. ACFT ONLY **FWD FNTRY** AFT ENTRY DOOR **GALLEY DOOR GALLEY DOOR CUT-IN AREA EACH SIDE OF ACFT** (RT SIDE ONLY) (RIGHT SIDE ONLY) **ENTRY DOOR**

EXTERNAL HANDLE

(NOT MARKED ON ALL ACFT)

O. 00-105E-9

APPLICABILITY: 707-100/-200 -300/-400 720 & 720B

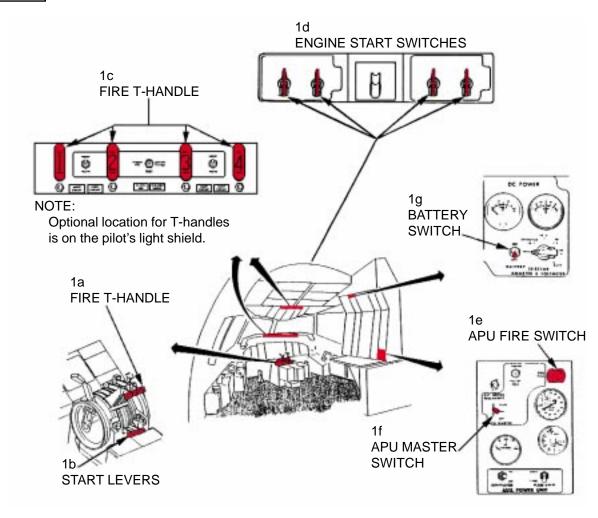
- 1. ENGINE SHUTDOWN
- a. Retard thrust levers, located on pilot's center console, to RETARD position.
- b. Place engine start levers, located on pilot's center console, to CUT OFF position
- c. Pull emergency fire T-handles, located top center above instrument panel.
- d. Place engine start switches, located on pilot's overhead panel, to OFF position.
- e. In case of APU fire, pull APU fire switch, located on the upper left flight engineer's panel, out to apply agent to APU.
- f. If no APU fire, place APU master switch, located on the upper left flight engineer's panel, to OFF position.
- g. Place battery switch, located on lower right flight engineer's panel, down to OFF position.
- 2. AIRCREW EXTRACTION
- a. Unlatch lap belts and remove shoulder harness from crewmembers.
- b. Depress seat control handles, located on flight engineer's seat, and rotate from left to right.

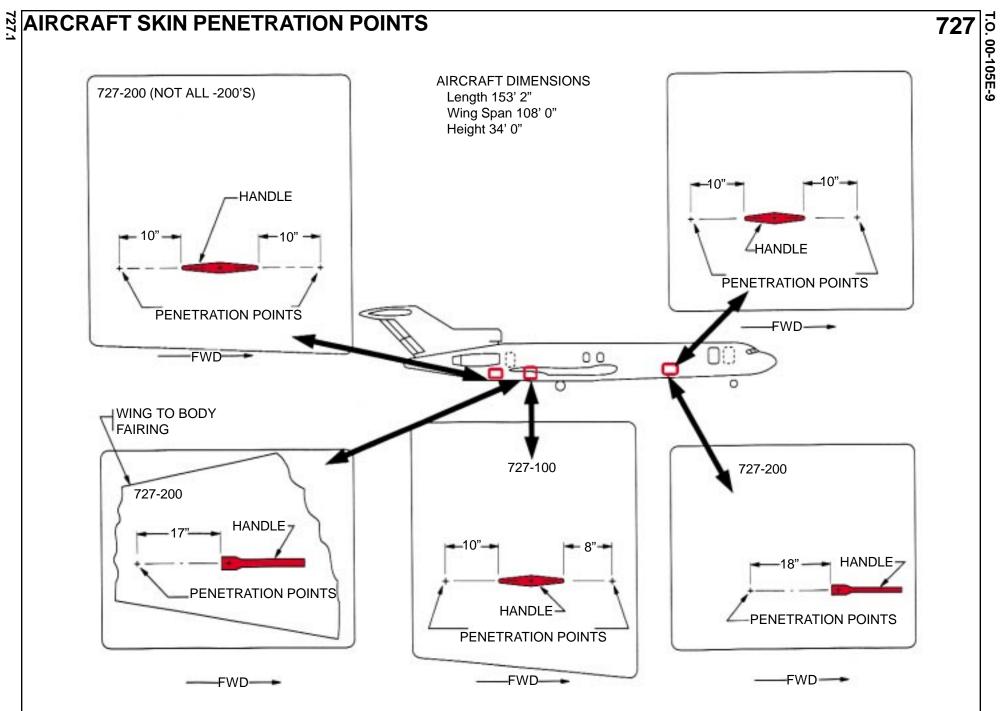
NOTE:

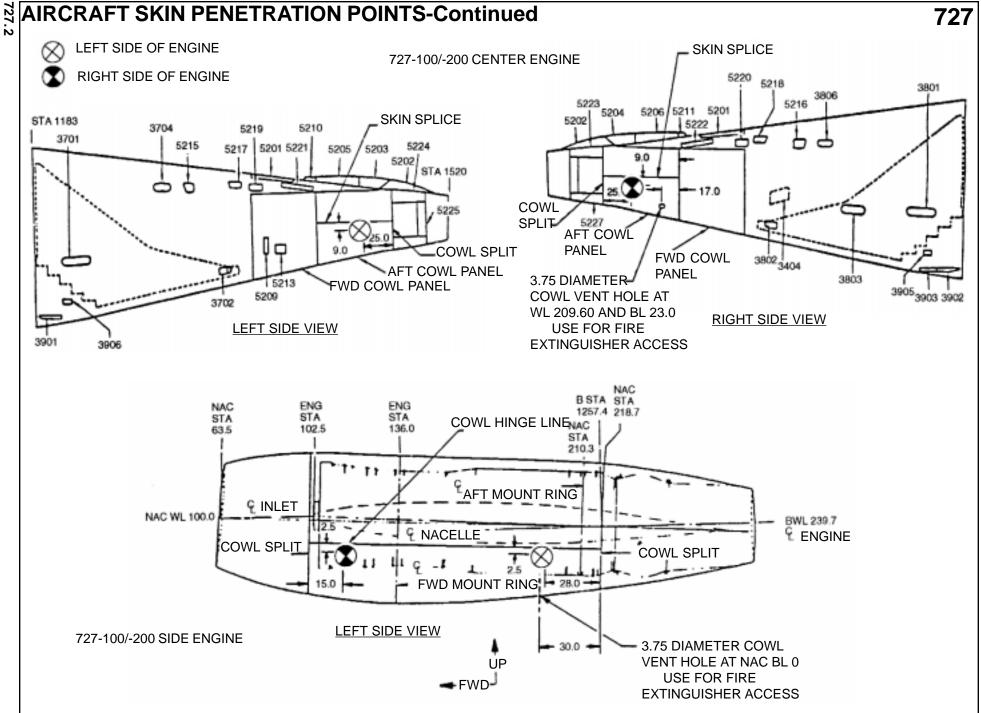
If seat tracks are not damaged during crash landing, use adjustable seat controls to retract seats to aft position.

NOTE:

Passenger seats are equipped with lap belts







SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw 24 Foot Ladder

AIRCRAFT ENTRY

Fire Drill II

NOTE:

Refer to the C-22 for more extensive information. Both airframes are identical except for military configurations.

AFT CARGO FUEL TANKS (OPTIONAL) 727 860 US GALS (FWD) 3255 LITERS 1070 US GALS (AFT) 4050 LITERS

NORMAL ENTRY

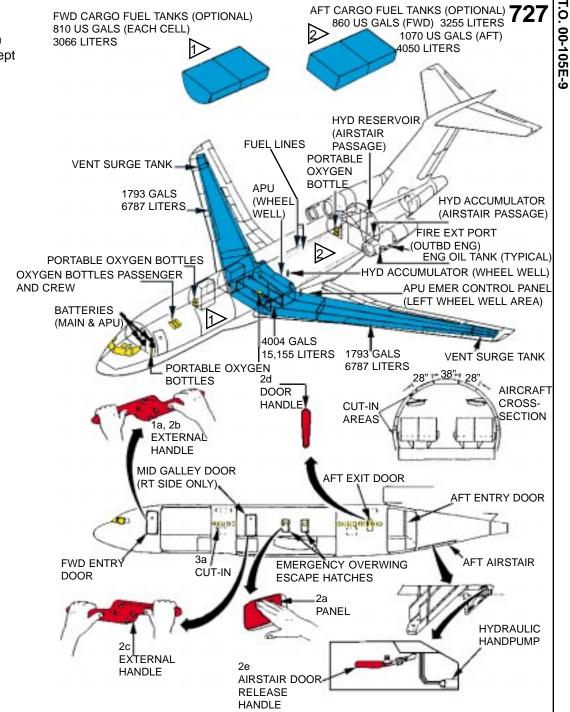


If Forward Entry Door is used for rescue, passenger escape chute-slide will be actuated if not disconnected from inside.

- a. RIGHT FORWARD ENTRY DOOR Pull handle outward. rotate clockwise and pull door outward to open position.
- 2. EMERGENCY ENTRY
- a. OVERWING ESCAPE HATCHES Push panel in, located top center of hatches, and push hatches inward and up.
- b. FORWARD ENTRY DOOR Pull external handle, located on entry door, outward, rotate clockwise and pull door out to open position.
- c. MID GALLEY DOOR Pull external handle, located on galley door right forward side, outward, rotate counterclockwise and pull door out to open position.
- d. AFT EXIT DOORS Pull lower end of handle, located top center of door left side of fuselage, outward, rotate clockwise and pull door outward. (Turn handle counterclockwise on doors located on right side of fuselage.)
- e. AIRSTAIR ENTRY DOOR Depress latch on access door, located right side aft fuselage, and pull handle down to release stairway. (Stairway can jack aircraft up for passenger escape in a no-gear situation.)
- AFT ENTRY DOOR Rotate handle, located on aft entry door, clockwise and push door inward.
- 3. CUT-IN
- a. Cut tenth window aft from crew compartment and fifth window forward from tail section as last resort.

NOTE:

Oxygen, rafts, flashlights, and fire extinguishers are located in overhead compartments.



1. ENGINE SHUTDOWN

- a. Retard thrust levers, located on pilot's center console, to RETARD position.
- b. Retard engine start levers, located on pilot's console, to CUT OFF position.
- c. In case of engine fire, pull appropriate engine fire T-handles, located on center overhead instrument panel glare shield.

NOTE:

Optional location for T-handles is on the pilot's light shield.

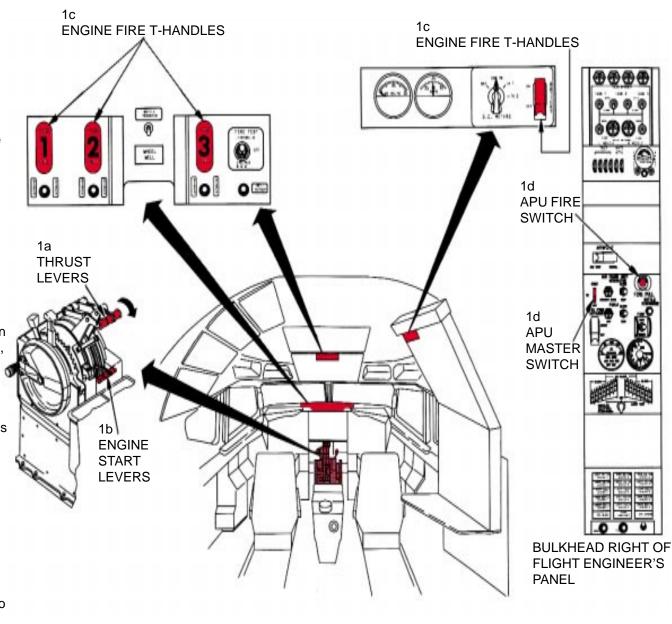
- d. In case of APU fire, pull APU fire switch to OFF and place APU master switch to OFF, located on rear cockpit wall.
- e. Lift guard and place battery switch, located on lower center flight engineer's upper left panel, to OFF position.

2. AIRCREW EXTRACTION

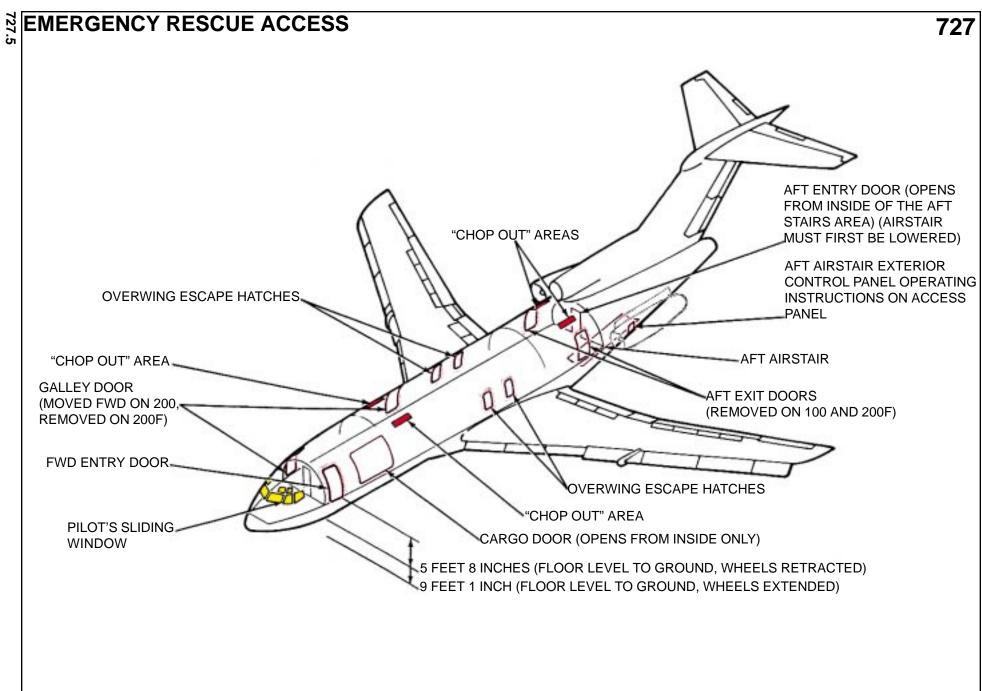
- a. Unlatch lap belt and remove shoulder harness from crewmembers
- b. FLIGHT ENGINEER'S SEAT Depress seat control handles and rotate seat clockwise.
- c. PASSENGER'S SEATS Passengers seats are equipped with lap belts only.

NOTE:

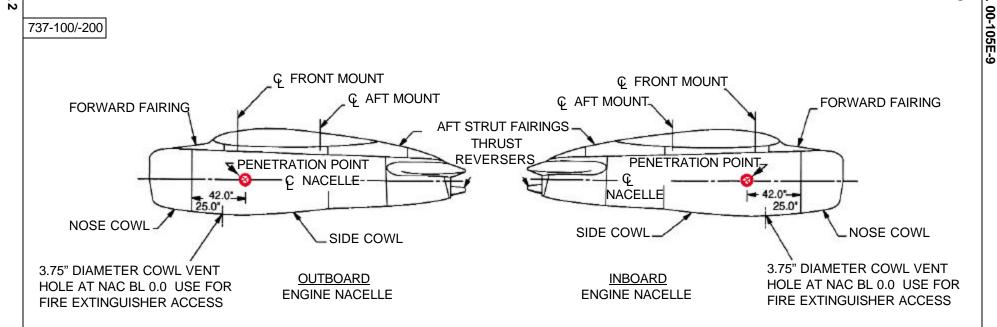
If seat tracks are not damaged during crash landing use adjustable seat control handles to retract seats to aft position.

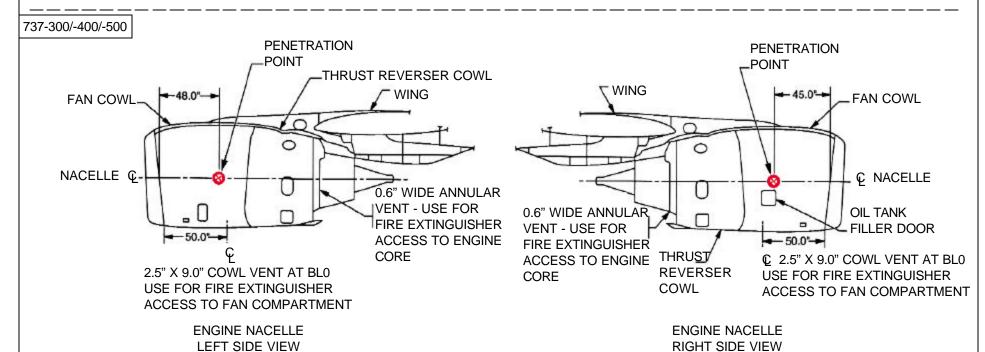


Г.О. 00-105E-9



737-100/-200





Power Rescue Saw

Fire Drill II

12 Foot Ladder

AIRCRAFT ENTRY-100/-200/-300/-400/-500 SERIES

NORMAL/EMERGENCY ENTRY

a. Push in top center panel on overwing escape hatches, located on both fuselage sides. Push hatch inward and upward.

NOTE:

Some models are equipped with stairs that can be deployed from forward and aft entry doors.

b. Pull handle on forward and aft entry doors, located left side of fuselage, outward and rotate clockwise. Pull doors outward.

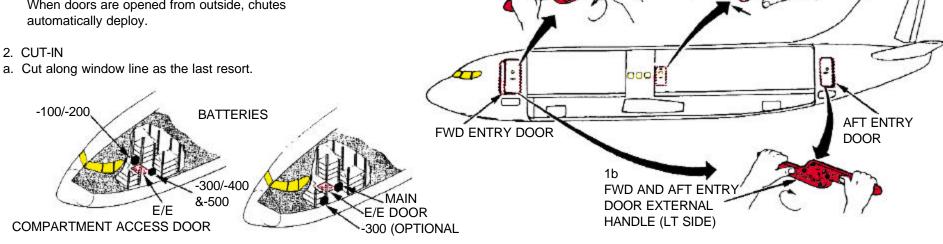
NOTE:

Depress button and pull handle out, rotate clockwise to extend stairway.

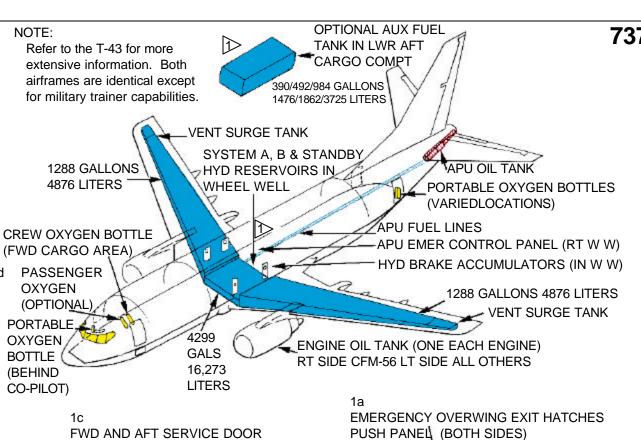
c. Pull handle on right forward and aft service doors, outward and rotate counterclockwise. Pull doors outward.

CAUTION

When doors are opened from outside, chutes



EXTERNAL HANDLE (RT SIDE)



00-105E-9

AIRCRAFT ENTRY-Continued

-600/-700/-800 BBJ SERIES

NORMAL/EMERGENCY ENTRY

a. Push in top center panel on overwing escape hatches, located on both fuselage sides. Push hatch inward and upward.

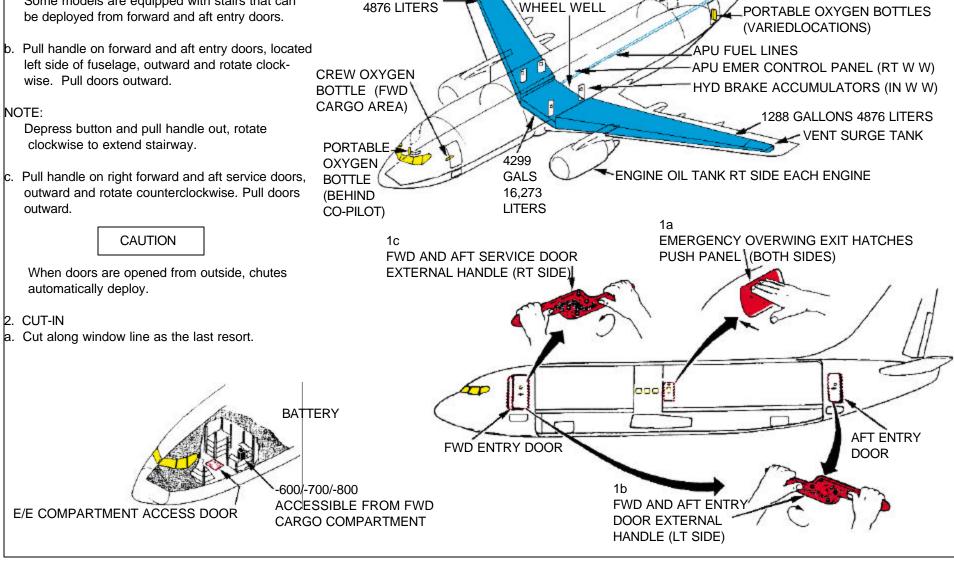
NOTE:

Some models are equipped with stairs that can

b. Pull handle on forward and aft entry doors, located left side of fuselage, outward and rotate clock-

NOTE:

outward and rotate counterclockwise. Pull doors outward.



1288 GALLONS

VENT SURGE TANK

HYD RESERVOIRS IN

SYSTEM A, B & STANDBY

00-105E-9

APU OIL TANK

≅ ENGINE SHUTDOWN AND **AIRCREW EXTRACTION**

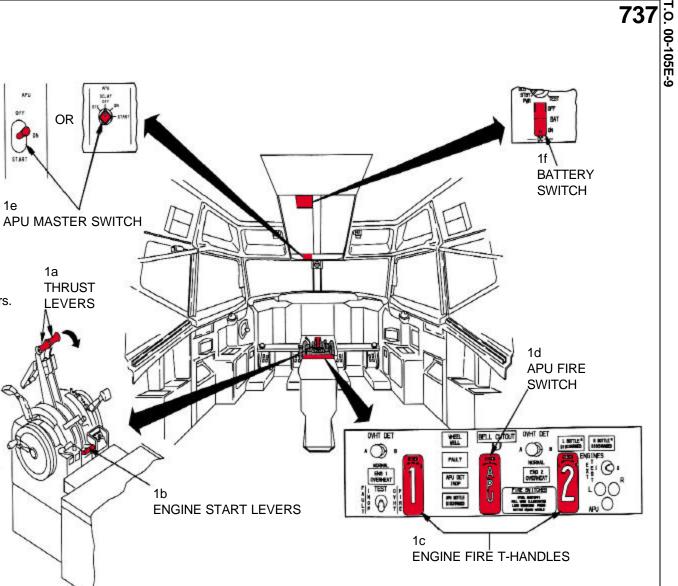
- 1. ENGINE SHUTDOWN
- a. Retard thrust levers, located on pilot's center console, to RETARD position.
- b. Retard engine start levers, located on pilot's console, to CUT OFF position.
- c. In case of engine fire, pull appropriate engine fire T-handles, located on center console forward of thrust levers. Turn right or left to discharge agent. If not illuminated, push and hold the button under the switch to release.
- d. In case of APU fire, pull the APU fire T-handle, located on center console forward of thrust levers. Turn right or left to discharge agent.
- e. Place APU master switch up to OFF position OR OFF position. (Switch type can vary.)
- f. Lift guard and place battery switch, located on pilot's center overhead panel, to OFF position.

2. AIRCREW EXTRACTION

- a. Unlatch lap belt and remove shoulder harness from crewmembers. See page T-43.5 for view of seats and associated controls.
- b. FLIGHT ENGINEER'S SEAT Depress seat control handles and rotate seat clockwise.
- c. PASSENGER'S SEATS Passengers seats are equipped with lap belts only.

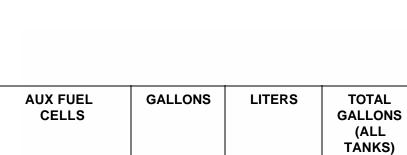
NOTE:

If seat tracks are not damaged during crash landing use adjustable seat control handles to retract seats to aft position.





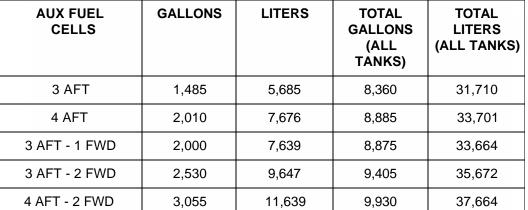




3,360

3,605

3,850



12,797

13,727

14,656

3 AFT/1 FWD



4 AFT



5 AFT - 2 FWD

5 AFT - 3 FWD

5 AFT - 4 FWD

3 AFT/2 FWD



10,235

10,480

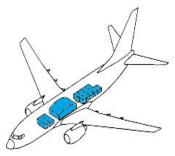
10,725

38,822

39,752

40,681

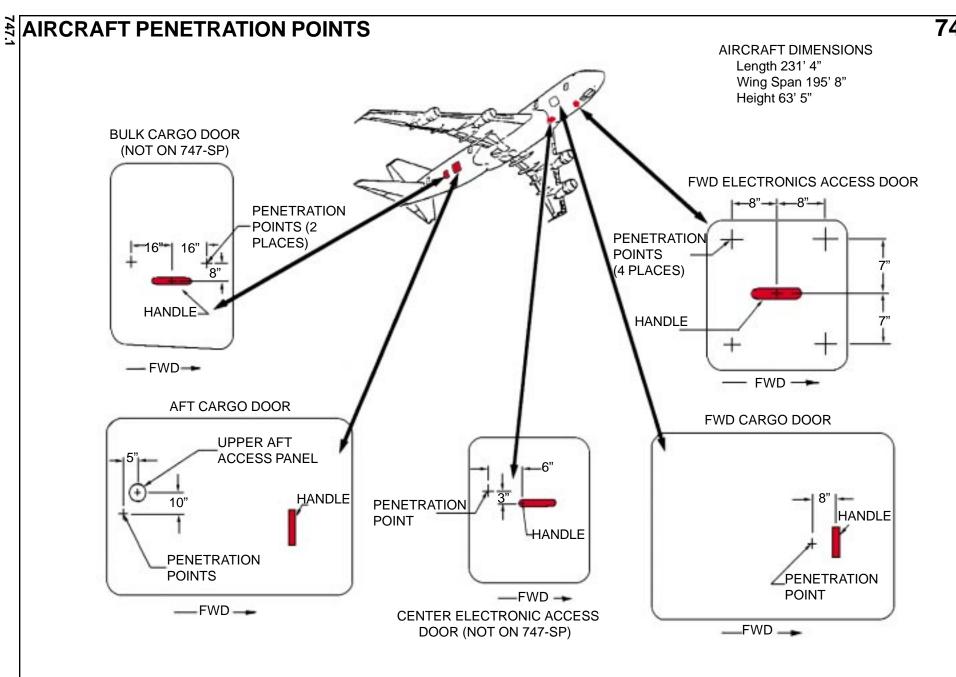
4 AFT/2 FWD



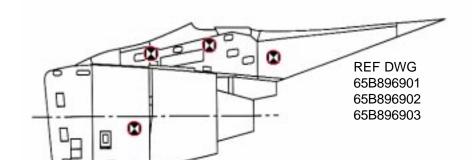
5 AFT/3 FWD

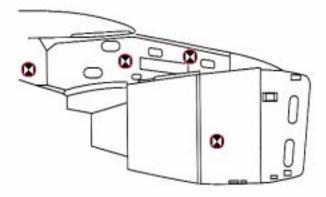
5 AFT/4 FWD

5 AFT/2 FWD



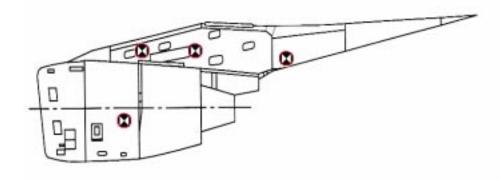
PENTRATION POINT





747 T.O. 00-105E-9

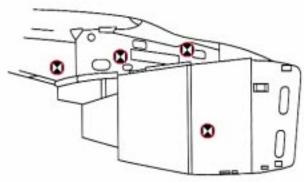
INBOARD NACELLE AND PYLON



INBOARD NACELLE AND PYLON

LEFT HAND VIEW

ROLLS ROYCE RB 211-524 ENGINES



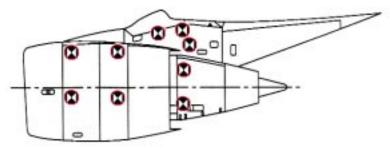
OUTBOARD NACELLE AND PYLON

RIGHT HAND VIEW

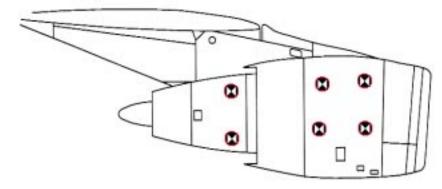
FOR CF6-50, E2 ENGINES



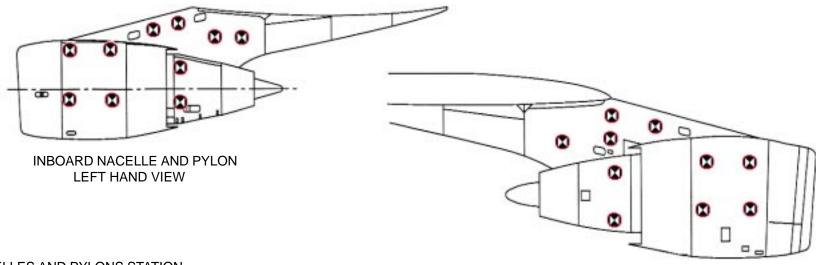
REF DWG 65B94001 65B94002 65B94003 65B94050



OUTBOARD NACELLE AND PYLON LEFT HAND VIEW



INBOARD NACELLE AND PYLON RIGHT HAND VIEW



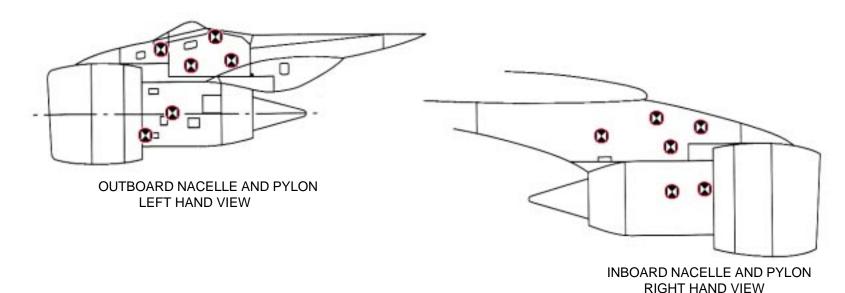
NACELLES AND PYLONS STATION DIAGRAM - GE CFC ENGINES

OUTBOARD NACELLE AND PYLON RIGHT HAND VIEW

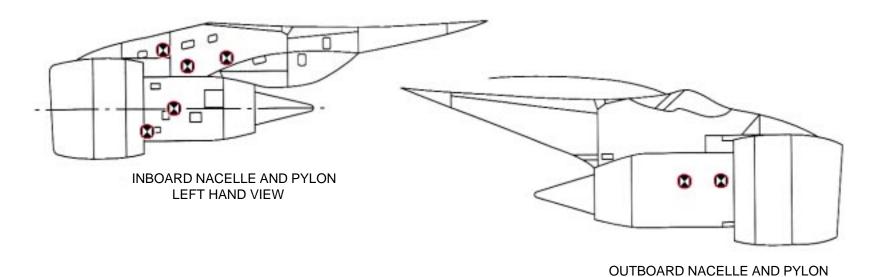
AIRCRAFT PENETRATION POINTS-Continued

FOR JT9D -3, -7, -7Q, AND -7R4G2 ENGINES

□ PENETRATION POINTS



747 T.O. 00-105E-9



RIGHT HAND VIEW

NOTE:

35 Foot Ladder Fire Drill II

AIRCRAFT ENTRY -100 & 200/-100 & 200 COMBL

Fuel capacity varies from model to model. FUEL VENT AND -

HATCH HANDLE

NOTE:

Refer to the E-4 for more extensive information. Both airframes are identical except for military capabilities.

NORMAL/EMERGENCY ENTRY

a. Pull entry door handles from recess position and rotate 180 degrees clockwise for entry doors located on left side and counterclockwise for entry doors on right side.

NOTE:

All ten entry doors open outward.

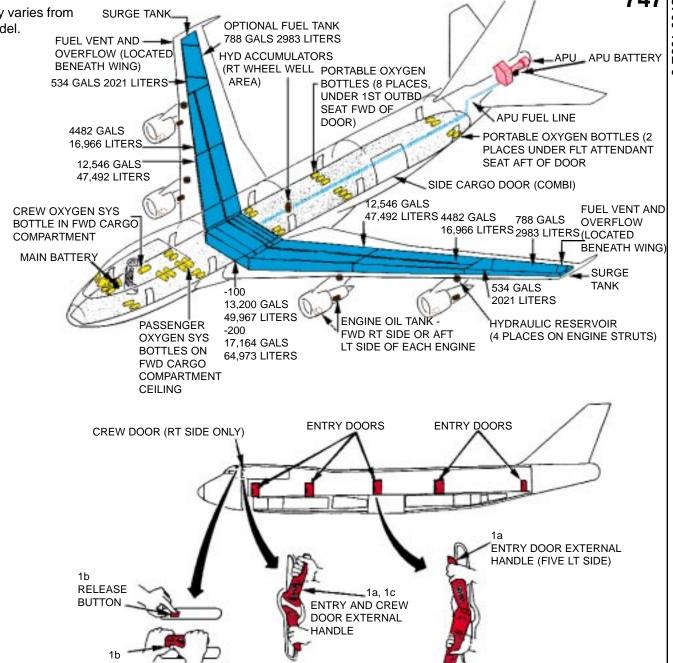
- b. Press release button on crew escape hatch, located top forward center of crew compartment, and rotate escape hatch handle 180 degrees clockwise. Push escape hatch inward.
- c. Pull handle, located on crew door, and rotate 180 degrees counterclockwise. Push door inward until slide tracks are engaged, then slide door aft.

NOTE:

- Opening a door from the outside disengages the emergency evacuation system and the escape chute will not deploy.
- All emergency escape chutes are deployed from inside the aircraft only.

2. CUT-IN

a. Cut areas along window lines as last resort.



ENGINE SHUTDOWN AND **AIRCREW EXTRACTION**

-100,-200,-300/-100,-200,-300 COMBI, SPECIAL PURPOSE AND FREIGHTER

- 1. ENGINE SHUTDOWN
- a. Retard throttles, located on pilot's center console, to IDLE CUTOFF position.
- b. Place engine start levers, located on pilot's center console, to CUTOFF position.

NOTE:

If engines fail to shutdown, pull emergency fire T-handles, located on pilot's overhead panel.

- c. Place battery switch, located on flight engineer's center panel, to OFF position.
- d. Place APU switch, located on flight engineer's upper left panel, to STOP position.

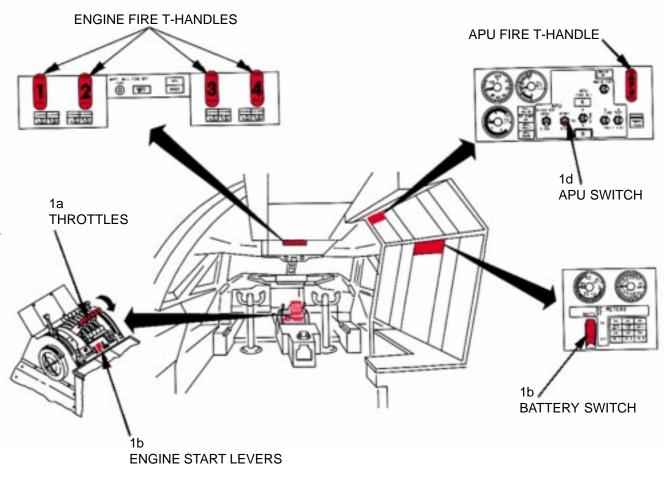
NOTE:

If APU fails to shutdown, pull emergency fire T-handle, located on flight engineer's overhead panel.

- 2. AIRCREW EXTRACTION
- a. Unlatch lap belts and remove shoulder harness from crewmembers.
- b. Depress control handles and rotate flight engineer's seat from left to right.
- c. Passenger seats are equipped with lap belts only.

NOTE:

If seat tracks are not damaged during crash landing use adjustable seat control to retract seats to aft position.



.O. 00-105E-9

HATCH HANDLE

AIRCRAFT ENTRY -300/-300 COMBI

NOTE:

Refer to the E-4 for more extensive information. Both airframes are identical except for military capabilities.

1. NORMAL/EMERGENCY ENTRY

a. Pull entry door handles from recess position and rotate
180 degrees clockwise for entry doors located on left
side and counterclockwise for entry doors on right side. UPPER DECK OXYGEN

NOTE:

All ten entry doors open outward.

- b. Press release button on crew escape hatch, located top forward center of crew compartment, and rotate escape hatch handle 180 degrees clockwise. Push escape hatch inward.
- Pull handle, located on crew door, and rotate 180 degrees counterclockwise. Push door inward until slide tracks are engaged, then slide door aft.

NOTE:

- Opening a door from the outside disengages the emergency evacuation system and the escape chute will not deploy.
- All emergency escape chutes are deployed from inside the aircraft only.

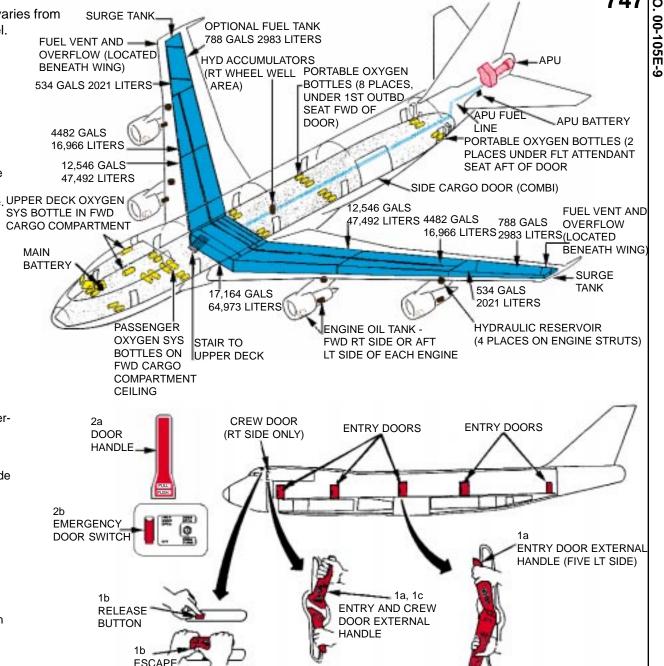
2. UPPER DECK EMERGENCY DOORS

a. Push access panel and lift door handle.

NOTE:

Lifting external handle disarms slide and disengages door interlock. Control access cover aft of door.

- b. Open cover and move guarded emergency door switch to open.
- 3. CUT-IN
- a. Cut areas along window lines as last resort.



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw 35 Foot Ladder

Fire Drill II

AIRCRAFT ENTRY - SPECIAL PURPOSE (SP)

1. NORMAL/EMERGENCY ENTRY

a. Pull entry door handles from recess position and rotate 180 degrees clockwise for entry doors located on left side and counterclockwise for entry doors on right side.

NOTE:

All ten entry doors open outward.

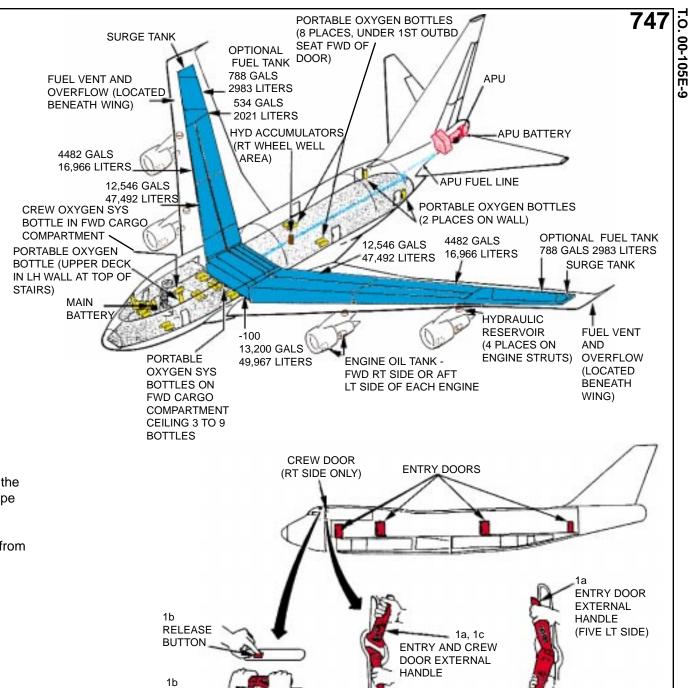
- b. Press release button on crew escape hatch, located top forward center of crew compartment, and rotate escape hatch handle 180 degrees clockwise. Push escape hatch inward.
- c. Pull handle, located on crew door, and rotate 80 degrees counterclockwise. Push door inward until slide tracks are engaged, then slide door aft.

NOTE:

- Opening a door from the outside disengages the emergency evacuation system and the escape chute will not deploy.
- All emergency escape chutes are deployed from inside the aircraft only.

2. CUT-IN

a. Cut areas along window lines as last resort.



ENTRY DOOR

SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw

35 Foot Ladder

Fire Drill II

AIRCRAFT ENTRY - FREIGHTER

1. NORMAL/EMERGENCY ENTRY

 a. Pull entry door handles from recess position and rotate 180 degrees clockwise for entry doors located on left side and counterclockwise for entry doors on right side.

NOTE:

All entry doors open outward.

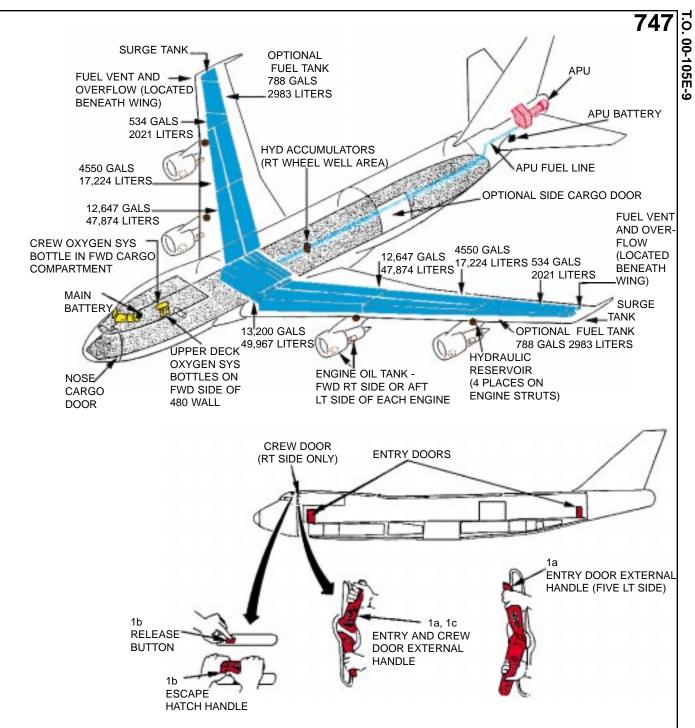
- b. Press release button on crew escape hatch, located top forward center of crew compartment, and rotate escape hatch handle 180 degrees clockwise. Push escape hatch inward.
- c. Pull handle, located on crew door, and rotate 180 degrees counterclockwise. Push door inward until slide tracks are engaged, then slide door aft.

NOTE:

- Opening a door from the outside disengages the emergency evacuation system and the escape chute will not deploy.
- All emergency escape chutes are deployed from inside the aircraft only.

2. CUT-IN

a. Cut areas along window lines as last resort.



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw 35 Foot Ladder

Fire Drill II

AIRCRAFT ENTRY -400 & 400 COMBI

1. NORMAL/EMERGENCY ENTRY

 Pull entry door handles from recess position and rotate 180 degrees clockwise for entry doors located on left side and counterclockwise for entry doors on right side.

NOTE:

All ten entry doors open outward.

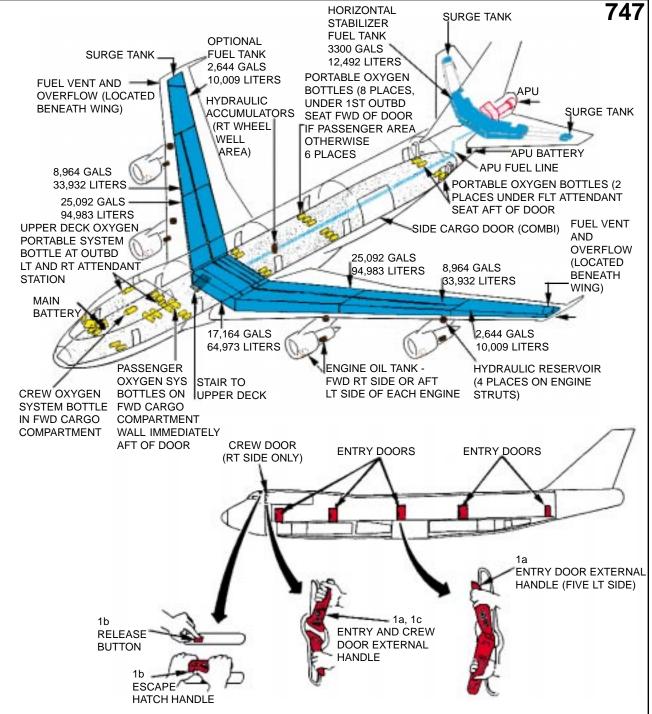
- b. Press release button on crew escape hatch, located top forward center of crew compartment, and rotate escape hatch handle 180 degrees clockwise. Push escape hatch inward.
- Pull handle, located on crew door, and rotate 180 degrees counterclockwise. Push door inward until slide tracks are engaged, then slide door aft.

NOTE:

- Opening a door from the outside disengages the emergency evacuation system and the escape chute will not deploy.
- All emergency escape chutes are deployed from inside the aircraft only.

2. CUT-IN

a. Cut areas along window lines as last resort.



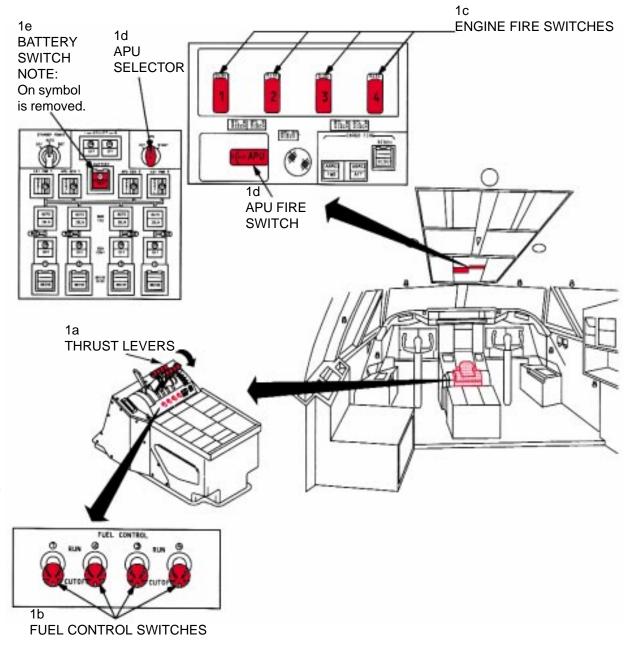
.O. 00-105E-9

ENGINE SHUTDOWN AND AIRCREW EXTRACTION

- 1. ENGINE SHUTDOWN -400/-400 COMBI AND -400 FREIGHTER
- a. Retard thrust levers, located on pilot's center console, to RETARD position.
- b. Place fuel control switches, located on pilot's center console under thrust levers, to CUT OFF position.
- c. In case of engine fire, pull engine fire switches, located on pilot's overhead center panel. If not illuminated, may require pushing and holding the button under the switch to release.
- d. In case of APU fire, pull APU fire switch, located on pilot's overhead center panel under engine fire switches. If not illuminated, may require pushing and holding the button under the switch to release. Rotate APU selector to OFF.
- e. Press battery switch, located on pilot's overhead center panel left side, to OFF.
- 2. AIRCREW EXTRACTION
- a. Unlatch lap belts and remove shoulder harness from crewmembers.
- b. Depress control handles and rotate flight engineer's seat from left to right.
- c. Passenger seats are equipped with lap belts only.

NOTE:

If seat tracks are not damaged during crash landing, use adjustable seat control to retract seats to aft position.



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw

35 Foot Ladder

Fire Drill II

AIRCRAFT ENTRY -400 FREIGHTER

1. NORMAL/EMERGENCY ENTRY

 a. Pull entry door handles from recess position and rotate 180 degrees clockwise for entry doors located on left side and counterclockwise for entry doors on right side.

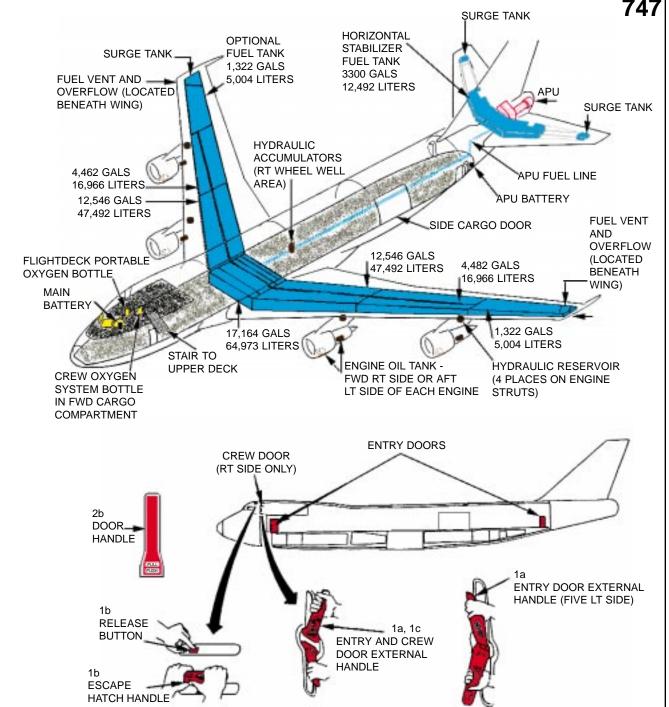
NOTE:

All entry doors open outward.

- b. Press release button on crew escape hatch, located top forward center of crew compartment, and rotate escape hatch handle 180 degrees clockwise. Push escape hatch inward.
- c. Pull handle, located on crew door, and rotate 180 degrees counterclockwise. Push door inward until slide tracks are engaged, then slide door aft.

NOTE:

- Opening a door from the outside disengages the emergency evacuation system and the escape chute will not deploy.
- All emergency escape chutes are deployed from inside the aircraft only.
- 2. UPPER DECK CREW SERVICE DOOR
- a. To unlock door, push access panel.
- b. Lift door handle.
- 3. CUT-IN
- a. Cut areas along window lines as last resort.



NOTES:

- Major US carriers represented in CRAF are managed by AMC, Scott AFB, IL in the Civil Air Directorate for Operations. Short and long range aircraft are used based on a particular task. Nearly 20 million tons capacity can be moved on any given day. 536 aircraft are currently committed.
- Commercial aircraft used as US strategic airlifters have promised, under the CRAF program, to make up more than 90 percent of the Air Force's longrange passenger-carrying capability and 30 percent of its cargo-hauling capability. As of 1995, commitments for the 747 aircraft designated by the USAF as the C-19, are for 136 passenger and 110 cargo equivalents. These figures are based on current European-based scenarios. This affects long-range international routes.
- The 747 "classic" or -100/200 model can be converted from a passenger to a freighter configuration in a matter of hours. The main entrance is main deck cargo capability where the side cargo door is modified for this conversion when needed. Passenger seats are removed or reduced in number and the main deck is converted to accept pallets.

Aeromedical evacuation aircraft or flying hospital configurations are also part of CRAF. Air Force kits converting aircraft into flying medical facilities fit only Boeing 767s. See the 767 segment for this information. 44 aircraft are needed to fulfill requirements. 19 are committed.

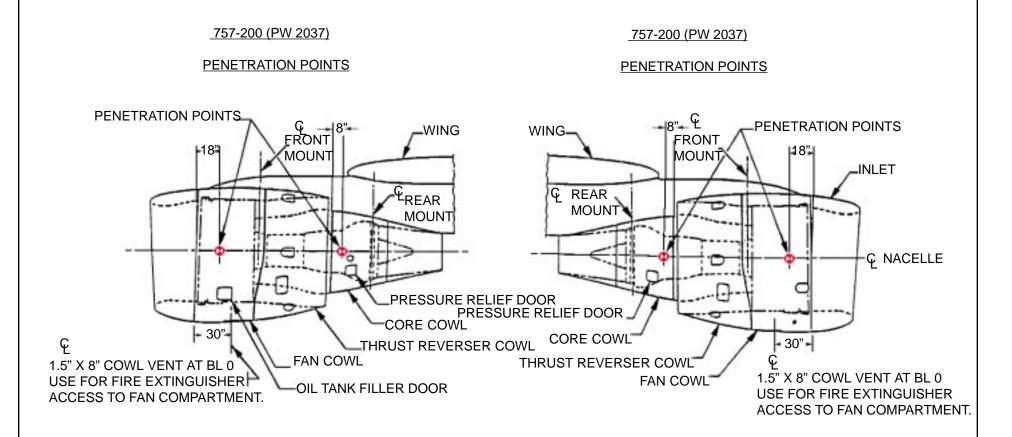
- · There are three stages in a call-up emergency:
- Stage I: Can be set in motion by the head of the US Transportation Command. The use of a few aircraft from any one carrier resulting in a minimal impact on normal civilian business.
- Stage II: Activated only at the Secretary of Defense level. Impact is necessarily more serious. Airlines should be able to maintain normal operations.
- Stage III: Must be authorized by an emergency declaration from the US President or Congress.
 Would likely cause a serious impact on US civilian transportation schedules.
- CRAF was extremely effective during the Gulf War (August 1990 to May 1991). 5,000 missions were flown. 60 percent for mobilization and 25 percent for cargo was air-lifted into the Kuwait theater of operations.

T.O. 00-105E-9

AIRCRAFT SKIN PENETRATION POINTS-Continued

ENGINE NACELLE

LEFT SIDE VIEW



ENGINE NACELLE

RIGHT SIDE VIEW

ENGINE AND APU SHUTDOWN AND AIRCREW EXTRACTION

-200/-200 COMBI & -200 PACKAGE FREIGHTER

1. ENGINE AND APU SHUTDOWN

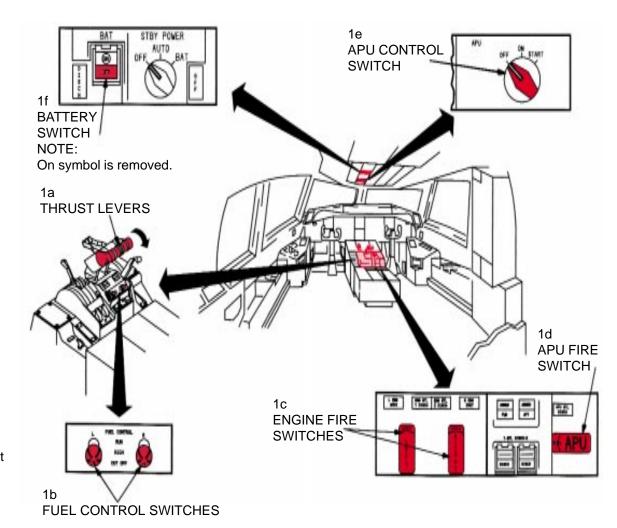
- a. Retard thrust levers, located on pilot's center console, to RETARD position.
- b. Place fuel control switches, located on pilot's center console under thrust levers, to CUT OFF position.
- c. In case of engine fire, pull engine fire switches, located on pilot's center console. Turn left or right to release agent. If not illuminated, push and hold the button under the switch to release.
- d. In case of APU fire, pull APU fire switch, located on pilot's center console to the right of the engine fire switches. Turn switch up or down to release agent. If not illuminated, push and hold the button under the switch to release.
- e. Rotate APU control switch, located on pilot's overhead panel to OFF.
- f. Press battery switch, located on pilot's overhead center panel left side, to OFF.
- a. There is a set of remote APU shutdown controls mounted on the forward landing gear. The APU ground control panel contains a fire warning light, a warning horn, a shutdown switch which shuts down the APU, arms a fire extinguisher, activates the horn and a bottle discharge switch which discharges agent into the APU compartment.

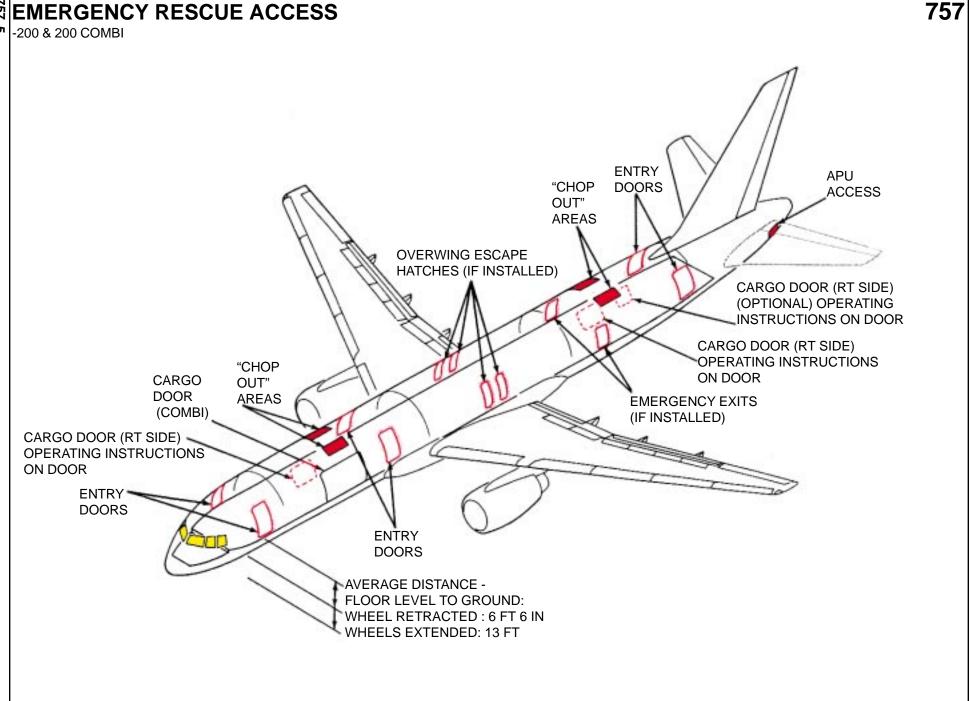
2. AIRCREW EXTRACTION

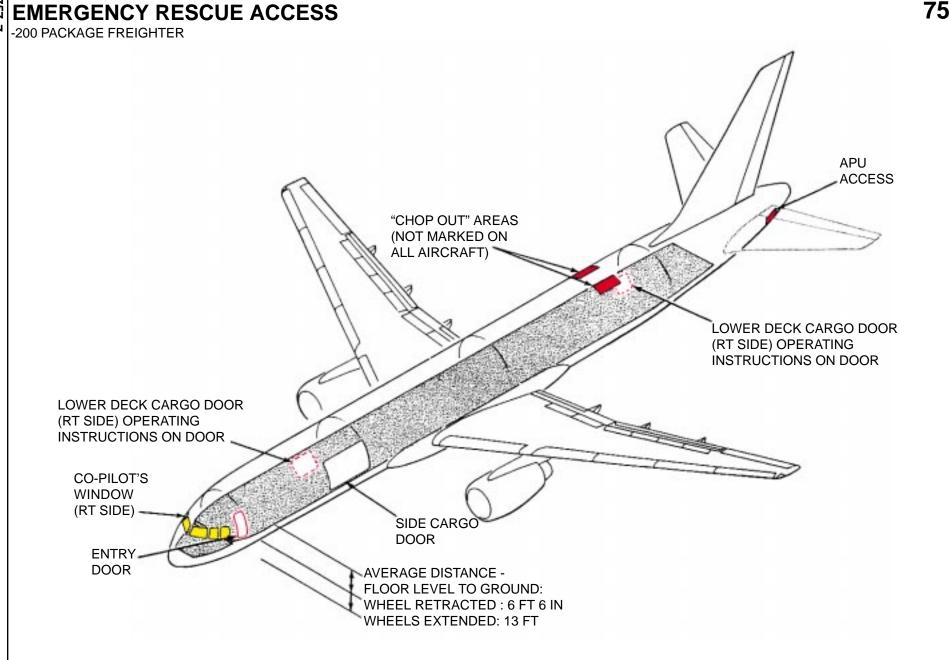
- a. Unlatch lap belts and remove shoulder harness from crewmembers.
- b. Depress control handles and rotate flight engineer's seat from left to right.
- c. Passenger seats are equipped with lap belts only.

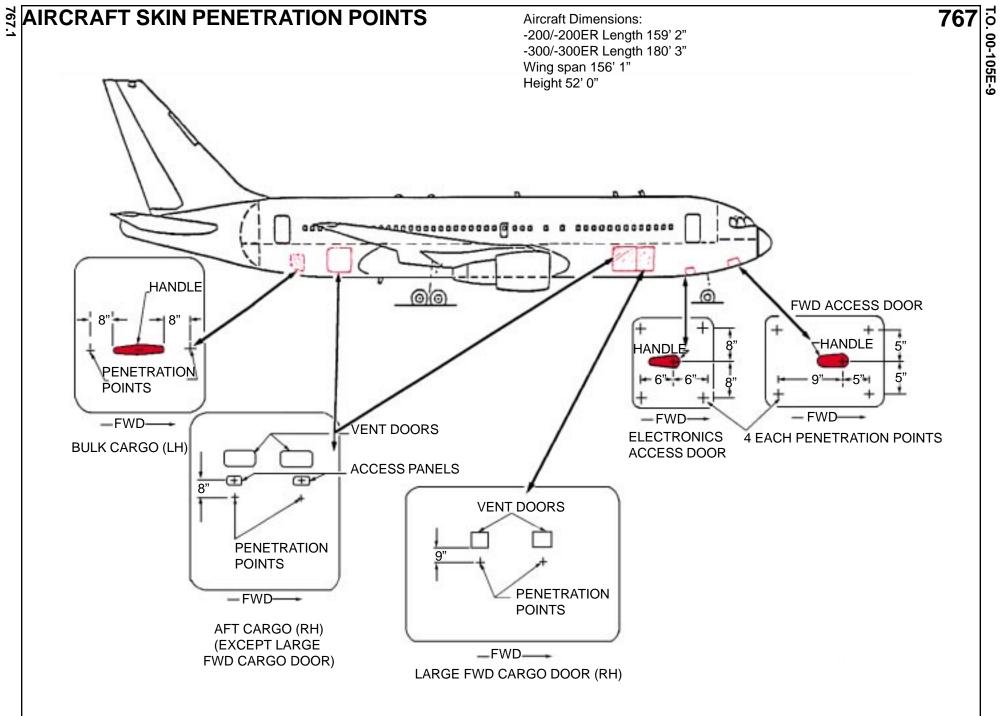
NOTE:

If seat tracks are not damaged during crash landing, use adjustable seat control to retract seats to aft position.









EQUIPMENT ACCESS DOOR

APU BATTERY

NOSE GEAR DOOR

767

SURGE

TANK

ENTRY/SERVICE

DOOR HANDLE

1a -1c

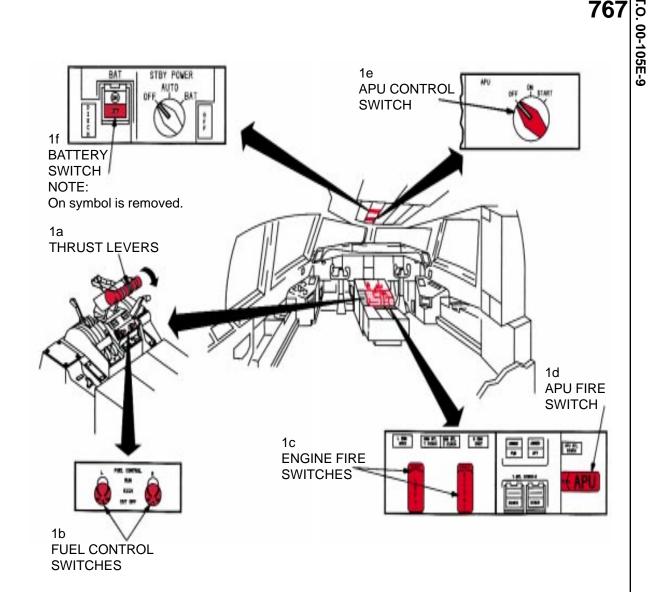
a. Cut areas along window lines as last resort.

ENGINE SHUTDOWN AND AIRCREW EXTRACTION

- 1. ENGINE SHUTDOWN
- a. Retard thrust levers, located on pilot's center console, to RETARD position.
- b. Place fuel control switches, located on pilot's center console under thrust levers, to CUT OFF position.
- c. In case of engine fire, pull engine fire switches, located on pilot's center console. Turn left or right to release agent. If not illuminated, push and hold the button under the switch to release.
- d. In case of APU fire, pull APU fire switch, located on pilot's center console to the right of the engine fire switches. Turn switch up or down to release agent. If not illuminated, push and hold the button under the switch to release.
- e. Rotate APU control switch, located on pilot's over head panel to OFF.
- f. Press battery switch, located on pilot's overhead center panel left side, to OFF.
- 2. AIRCREW EXTRACTION
- a. Unlatch lap belts and remove shoulder harness from crewmembers.
- b. Depress control handles and rotate flight engineer's seat from left to right.
- c. Passenger seats are equipped with lap belts only.

NOTE:

If seat tracks are not damaged during crash landing, use adjustable seat control to retract seats to aft position.



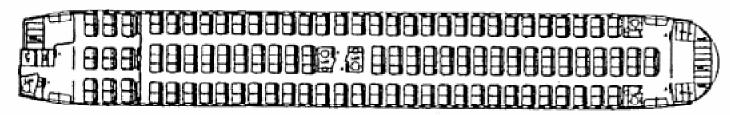
767

T.O. 00-105E-9

-200 & -300 MODELS

767-200



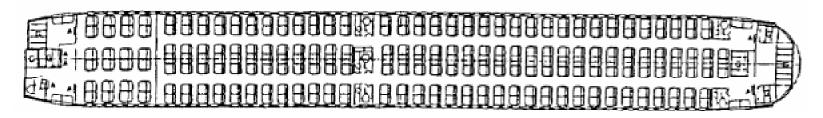


18 FIRST CLASS - 38 INCH PITCH

193 TOURIST - 34/33 INCH PITCH

211 PASSENGERS (24 SEATS - 33 INCH PITCH)

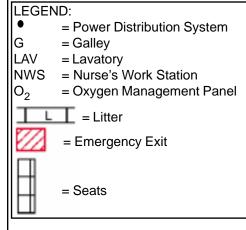
767-300



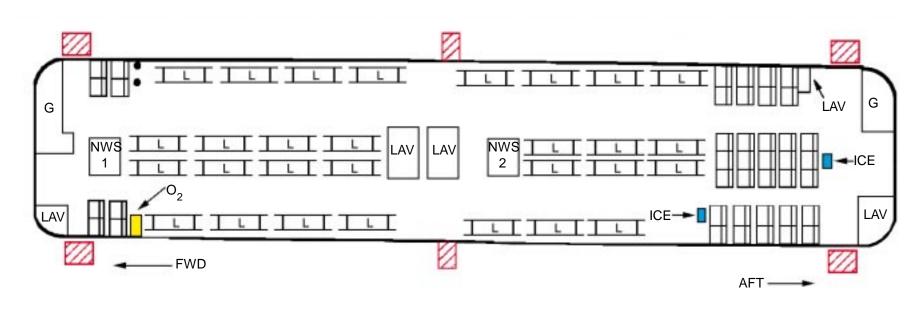
24 FIRST CLASS - 38 INCH PITCH

234 TOURIST - 34/33 INCH PITCH

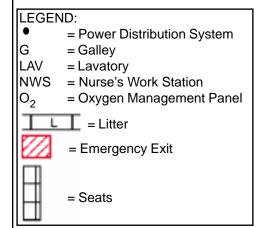
258 PASSENGERS (33 SEATS - 33 INCH PITCH)



NOTE: Aircraft has capacity for 87 litters and 41 Ambulatory/Crew.

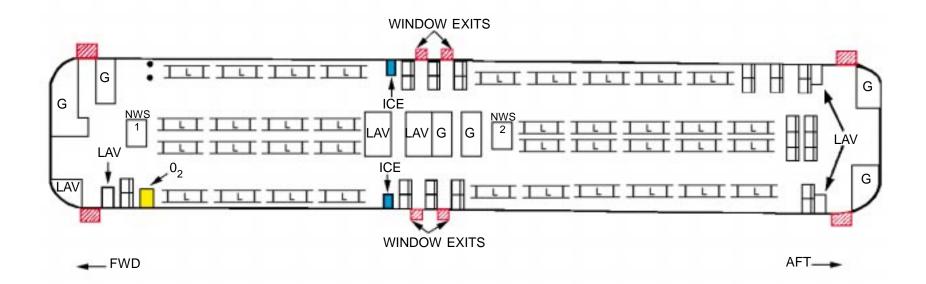


-300 SERIES AEROMEDICAL EVACUATION CONFIGURATION



NOTE:

Aircraft has capacity for 111 litters and 30 Ambulatory/Crew.



//

-200A/B & -300



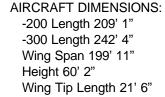
Colored areas indicate where the tough, light weight reinforced plastics improve damage resistance, damage tolerance, resist corrosion and fatigue. Composition is 9% of structural weight. See next page for specific material location.

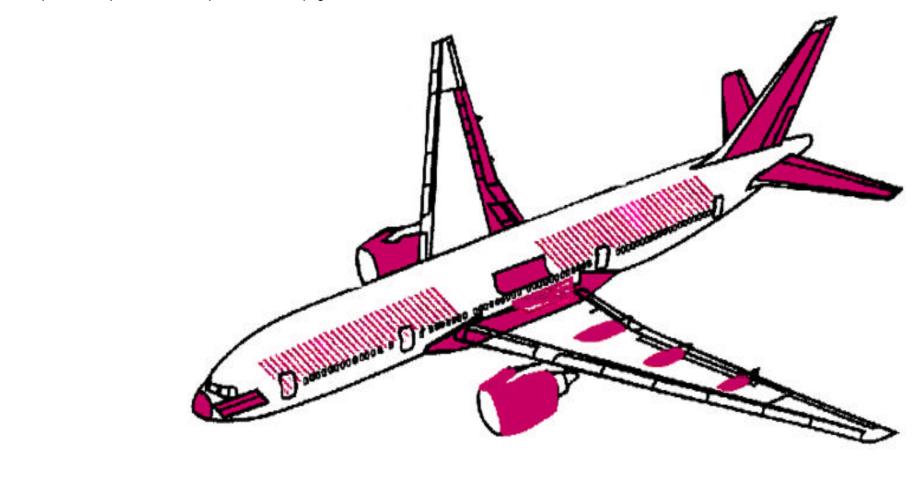
NOTE:

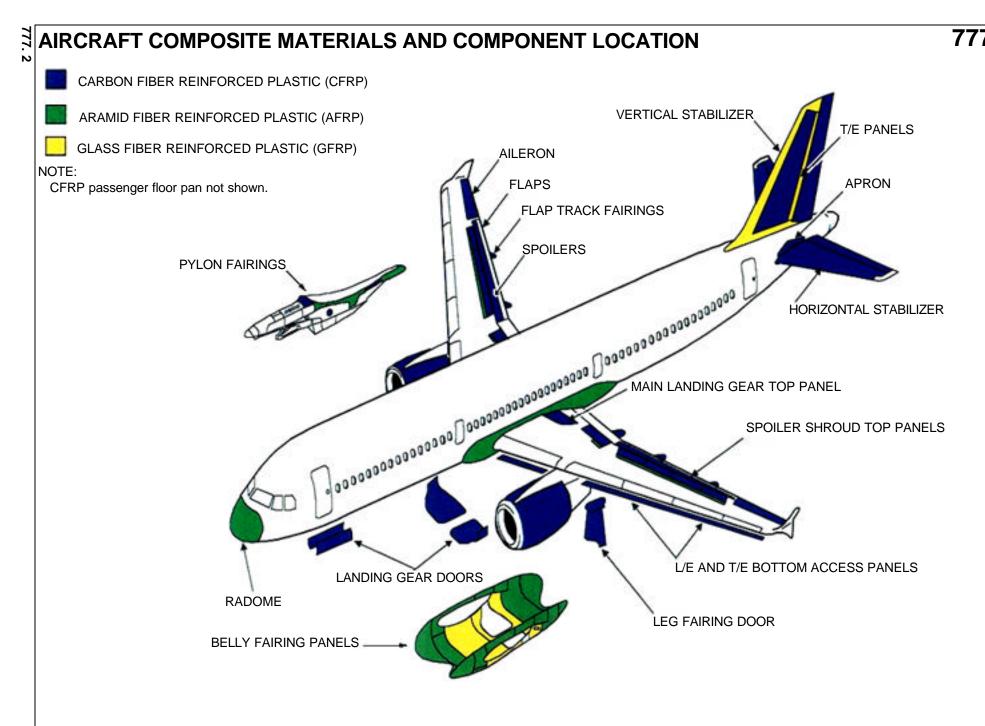
Folding wing tips (optional) are illustrated in down position.

NOTE:

Skin penetration points - see "Chop Out" areas on page 777.5.







SPECIAL TOOLS/EQUIPMENT Power Rescue Saw 35 Foot Ladder

Fire Drill II

AIRCRAFT ENTRY -200A/B & 300

- 1. NORMAL/EMERGENCY ENTRY
- To open all entry/service doors: rotate handle counterclockwise 120 degrees.
- b. Push door outward.

NOTES:

- Escape slide disarms automatically when door or hatch is opened from the outside.
- Flightdeck windows cannot be opened from the outside.
- 2. CUT-IN
- a. Cut areas along window lines as last resort.

NOTE:

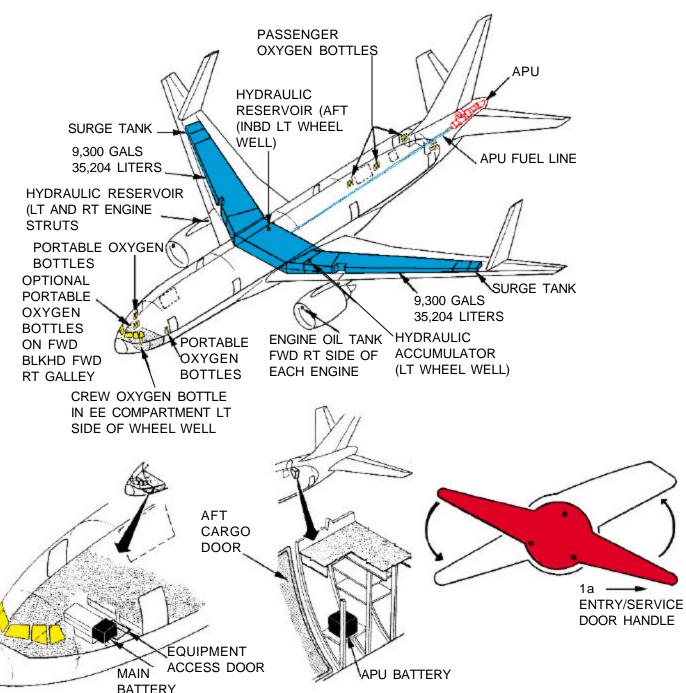
PASSENGER CAPACITY

-200A/B: 375 - 400 Two Class

305 - 328 Three Class 418 - 440 All Economy

-300: 300 - 368 Three Class

- 550 High Density

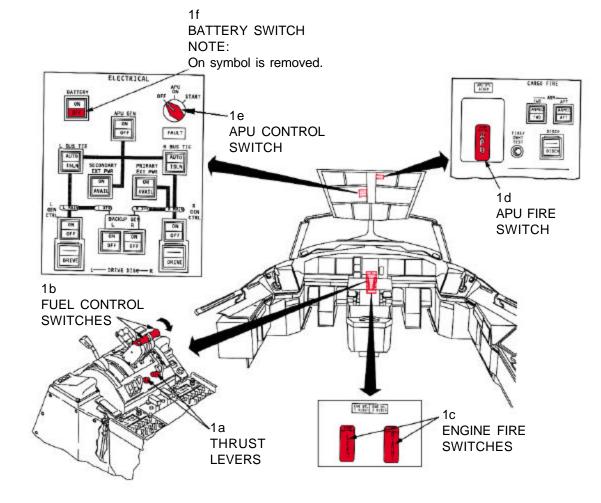


ENGINE SHUTDOWN AND AIRCREW EXTRACTION

- 1. ENGINE SHUTDOWN
- a. Retard thrust levers, located on pilot's center console, to RETARD position.
- Place fuel control switches, located on pilot's center console under thrust levers, to CUT OFF position.
- c. In case of engine fire, pull engine fire switches, located on pilot's center console. Turn left or right to release agent. If not illuminated, push and hold the button under the switch to release.
- d. In case of APU fire, pull APU fire switch, located on co-pilot's overhead center console upper left side. Turn switch up or down to release agent. If not illuminated, push and hold the button under the switch to release.
- e. Rotate APU control switch, located on pilot's over head center panel, to OFF.
- f. Press battery switch, located on pilot's overhead center panel left side, to OFF.
- 2. AIRCREW EXTRACTION
- Unlatch lap belts and remove shoulder harness from crewmembers.
- b. Depress control handles and rotate flight engineer's seat from left to right.
- c. Passenger seats are equipped with lap belts only.

NOTE:

If seat tracks are not damaged during crash landing, use adjustable seat control to retract seats to aft position.



AVERAGE DISTANCE
FLOOR LEVEL TO GROUND
WHEELS RETRACTED: 8 FT 3 IN

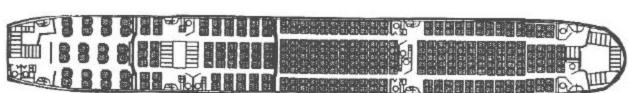
WHEELS EXTENDED: 16 FT 6 IN

ENTRY/

SERVICE DOOR -200A/B & 300

NOTE:

A new modular design allows airlines to move seats, galleys, and lavatories in a matter of hours to adapt to changing market conditions. Seating configurations range from six abreast in first class to 10 abreast in economy class.



6 ABREAST 24 FIRST CLASS 7 ABREAST 54 BUSINESS CLASS

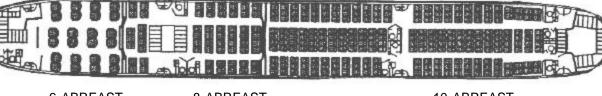
"TRI CLASS": 305 PASSENGERS

9 ABREAST 227 PREMIUM COACH CLASS

ADDED SEATS: 328 PASSENGERS

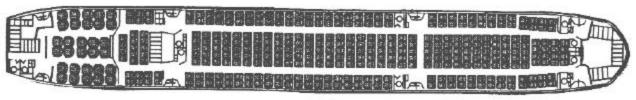
NOTE:

The flightdeck is composed of two crew members only. Two observer seats are also located in the flightdeck.



6 ABREAST 24 FIRST CLASS 8 ABREAST 61 BUSINESS CLASS 10 ABREAST 243 PREMIUM COACH CLASS

"DUAL CLASS": 375 PASSENGERS



6 ABREAST 30 FIRST CLASS 9 ABREAST 345 PREMIUM COACH CLASS

